

**INTERIM REMEDIAL ACTION REPORT
VETERANS MEMORIAL PARK
BLOCK 260, LOT 15.02
SOUTH PLAINFIELD, NEW JERSEY
CASE NUMBER 01-08-07-1845-23
PMK GROUP #0502014-01**

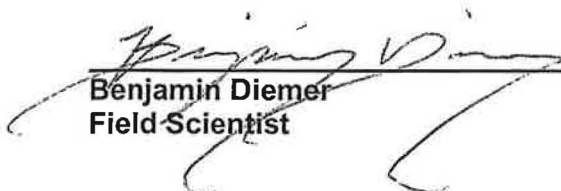
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Description

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Plate 5	-	Areas of Deed Restriction

Table #

Description

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Appendix #

Description

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Appendix B	-	Photodocumentation
Appendix C	-	Draft Deed Notice
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Attachment #

Description

Attachment 1	-	NJDEP Submittal Diskette
Attachment 2	-	Soil (Asbestos/Black "tar-like" Substance/PCB) Disposal Manifests
Attachment 3	-	Post-Excavation Analytical Results

1.0 INTRODUCTION

This report presents the results of the Interim Remedial Action (IRA) performed by **PMK Group (PMK)** at the Veterans Memorial Park site (herein referred to as "the Site") in South Plainfield, New Jersey. The Site is identified as Block 260, Lot 15.02 on the Tax Maps of the Borough of South Plainfield, Middlesex County, New Jersey. All IRA activities were performed in accordance with the NJDEP *Technical Requirements for Site Remediation* (N.J.A.C. 7:26E) and also in accordance with the approved scope of work identified in the Interim Remedial Action Workplan (IRAW), dated October 18, 2002 and the IRAW Addendum dated June 18, 2003, prepared by PMK.

A Site Location Map is presented as Plate 1.

2.0 PROJECT BACKGROUND

2.1 USEPA FLOODPLAIN SOIL AND SEDIMENT INVESTIGATION REPORT (JANUARY 17, 2000)

The USEPA field investigation team collected 34 soil samples to investigate the floodplain area down gradient of the Cornel Dublier Superfund Site. The soil and sediment samples collected from the flood plain area were analyzed for PCBs. All soil samples were collected approximately zero to two inches below surface grade (bsg).

2.2 PRELIMINARY INVESTIGATION PERFORMED BY THE USEPA

On August 7, 2001, the New Jersey Department of Environmental Protection (NJDEP) received an anonymous phone call from a resident of South Plainfield; a complaint concerning a tar like substance that was emanating from the ground surface was filed. In response, the US Environmental Protection Agency (USEPA) collected soil samples from the suspected area and forwarded the samples for poly-chlorinate biphenyls (PCB) analysis. USEPA personnel verbally communicated this information and the PCB analytical results to Mr. Michael Zushman, Director of Emergency Response team, Borough of South Plainfield. Mr. Zushman informed PMK that he was notified by the USEPA that the soil samples collected for PCB analysis did not reveal concentrations above the applicable Soil Cleanup Criteria (SCC). The results of the USEPA investigation were not available for PMK's review.

2.3 PRELIMINARY ASSESSMENT

In addition to the USEPA investigation of the Site, the Borough of South Plainfield retained **PMK** to perform a Preliminary Assessment (PA) of the Site. A PA was performed in accordance with N.J.A.C 7:26E-3.2. On April 15, 2002, a PA Report for the Site was prepared and submitted to the NJDEP. The completion of the PA resulted in the identification of seven areas of concern (AOC) which are listed below:

AOC #1 – Historic Fill or any Other Fill Material: - Based on a review of the available Historical Topographical Maps and municipal personnel interviews, the property and adjacent properties consisted of low-lying, wetland areas, which have been reportedly filled in to raise grade and allow for municipal use. PMK recommended collecting soil

samples to verify the presence and to identify potential historic fill contaminants present at the site.

AOC #2 – Electrical Transformers: Our site reconnaissance identified one transformer mounted on a utility pole on the property. As no leaking or staining was noted on the transformer, PMK recommended no further investigation of this AOC.

AOC #3 Areas of Stressed Vegetation: Several areas of stressed vegetation were noted throughout the northern and central portions of the property. PMK recommended collecting soil samples within the limits of the stressed areas in an attempt to identify potential impacts in the underlying soils.

AOC #4 Areas which receive flood or storm water from potentially contaminated areas:
- Based upon field observations and review of the Site Report by Environmental Data Resources, Inc, the Site is depicted as being within the 100 year flood zone. It should also be noted that three contaminated sites have been reported up gradient of the Site. PMK recommended further investigation of this AOC in an attempt to identify potential environmental impacts to the Site from offsite sources.

AOC #5 Black Substance emanating from the Ground: - During our site reconnaissance, sections of the grass field had areas where a black "tar-like" substance had emanated from the ground. PMK recommended further investigation of this AOC to attempt to identify the noted substance and to evaluate the potential for the substance to impact the Site.

AOC #6 Sink Holes: - During our site reconnaissance several sinkholes were noted on the property. PMK recommended performing a geophysical survey of the area to identify any subsurface metallic anomalies, including, but not limited to, buried drums. The need for further soil investigations would be determined based on the results of the geophysical survey.

AOC #7 Discolored or Spill Areas: -There are two areas in close proximity to one another, where a blue staining and a black powder-like substance were observed on the ground. During a second visit, the blue substance was identified as the remains of a melted plastic drum, used throughout the Site as garbage cans and the black powder is the ash from a charcoal barbecue grill used in the picnic area. PMK recommended these areas be cleaned and the debris be properly disposed of.

2.4 LIMITED SITE INVESTIGATION

The Limited Site Investigation (LSI) activities were performed to evaluate AOC #1, AOC #3, AOC #5 and AOC #6 identified on the property in the PA Report, dated April 15, 2002. AOC #2 and AOC #7 were not investigated as a no further investigation recommendation was made in the PA report. AOC# 4 was not investigated because the information requested through the freedom of information was not available for PMK's review.

The LSI consisted of the advancement of seven exploratory soil boring and the collection of five (5) representative soil samples for priority pollutant plus a forward library search of forty non-targeted compounds (PP+40). The LSI report was submitted to the Borough of South Plainfield on April 12, 2002.

2.5 EMERGENCY ACTIONS

On July 17, 2002, Mr. Robert Spiegel, President of Edison Wetlands Commission, pointed out two areas of concern: (1) a "tar-like" substance emanating from the ground; which was previously identified as a AOC #5 by PMK and (2) suspected asbestos containing material (ACM), was discovered along the embankment of the dry pond area. The tiles and sheets, potentially ACM, identify by Mr. Spiegel, was not included in PMK's previous study area. However, AOC #8 - Asbestos Containing Material (ACM) is included as part of the present study.

In addition, Mr. Spiegel collected two sediment samples from the dry pond area (outside the PMK study area) and forwarded them to a laboratory for priority pollutant analysis. Please note that PMK requested copies of analytical results from his office several times for NJDEP submission. At present time PMK is waiting for receipt of the analytical results from the Edison Wetland Association.

The Middlesex County Health Department (MCHD) was at the Site to investigate the area of concerns identified. Mr. Thomas Sikorski of the MCHD informed PMK that they collected two confirmatory soil samples to investigate the unknown black "tar-like" substance and gathered two bulk material samples from the visually exposed tiles in the embankment of the dry pond area.

On July 19 and 23, 2002, the NJDEP Bureau of Field Operations (BFO) responded to the Site in response to the Borough's request. The NJDEP representatives collected field samples of the black "tar-like" substance and potential ACM suspect flooring tiles for visual inspection. Based on the findings, the Borough of South Plainfield officials decided to close the park temporarily and signage was posted.

On July 31, 2002, PMK prepared and submitted Memorandum #1 to the NJDEP for review and approval. Memorandum #1 included an emergency scope of work (SOW) for the Site. The SOW was approved by the NJDEP on August 6, 2002.

2.5.1 Supplemental Investigations as a Result of Emergency Actions (July 17, 2002)

On July 23, 2002, a representative of PMK collected a sample of the black "tar-like" substance and gathered four bulk material samples of the suspected ACM. The sample of the black "tar-like" substance, GC-2, was collected from the surface and was forwarded to Chemtech Laboratories (NJ Lab. ID #12013), of Mountainside, New Jersey (Chemtech) for gas chromatograph (GC) fingerprint analysis and mass spectrometer (MS) analysis. Standard chains of custody procedures were implemented to track the samples.

The four bulk material samples were gathered from the bank of the wetlands transition zone near the dry pond area to confirm the presence of asbestos containing materials in the observed

tiles. The bulk material samples that were gathered were analyzed for asbestos content in accordance with the USEPA- approved petrographic method utilizing polarized light microscopy (PLM) with dispersion staining (EPA Method for Determination of Asbestos in Bulk Building Material, EPA 600/R- 93/116).

On July 24, 2002, a representative of PMK collected two confirmatory sediment samples, SS-1 and SS-2, from the dry pond area in the vicinity of the potential ACM tiles to evaluate the area identified by Mr. Spiegel. The sediment samples were forwarded to Chemtech for PP+40 analysis. Standard chains of custody procedures were implemented to track the samples. The sediment samples were collected outside the limits of the study area to confirm Mr. Spiegel's investigation. However, this area of concern is not address in this investigation.

2.5.2 Analytical Results of Supplemental Investigation

A review of the analytical results for the grab sample, GC-2, bulk material samples and sediment samples SS-1 and SS-2 collected from dry pond area revealed the following:

GC Fingerprint Analysis:

The results of the laboratory analysis performed on sample GC-2 for GC/MS analysis revealed the substance is a phenolic-based compound. However no specific compound was identified in the GC finger print analysis.

Bulk Material Samples, July 23, 2002

The results of the laboratory analysis performed on bulk material samples indicated that asbestos containing material was present in three of the samples: 0502014-01, 0502014-02, and 0502014-03. The results are summarized in the table below.

SAMPLE ID#	MATERIAL DESCRIPTION	SAMPLE LOCATION	ASBESTOS CONTENT
0502014-01	Grey/ tan fibrous heterogeneous	Bank of wetland	6.3%
0502014-02	Tan Fibrous Heterogeneous	Bank of wetland	18%
0502014-03	Brown Fibrous Heterogeneous	Bank of wetland	15%

Sediment Samples SS-1 and SS-2

The results of the laboratory analysis performed on soil samples SS-1 and SS-2 for PP+40 revealed several poly-aromatic hydrocarbons and PCB concentrations in excess of the NJDEP most stringent SCC.

2.6 FINDINGS OF TEST PIT INVESTIGATION AOC #1, AOC #4 AND AOC #8

Between August 7, 2002 and August 13, 2002, PMK representatives were onsite to conduct test pit investigations at the Site.

Ms. Linda Range
NJDEP
February 12, 2004
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AOC #1 Historic Fill Classifications

The test pit investigation revealed the following:

1. Visual observations of the test pits revealed that historic fill is present throughout the Site.
2. Ten soil samples were collected from six of the test pits to investigate their potential to contain contaminants.
3. The analytical results of the test pit investigation revealed the following:
 - An analytical result of soil sample TP-4 indicated concentrations of benzo(a)pyrene and PCBs in excess of the NJDEP SCC.
 - An analytical result of soil sample TP-6 indicated concentrations of PCBs and arsenic in excess of the NJDEP SCC. ^{0.5-3.1} ^{2.4}
 - An analytical result of soil sample TP-6d indicated concentrations of arsenic, beryllium, and lead in excess of the NJDEP SCC. ^{41.4} ^{2.4} ^{35.6} ^{6.5-7.0} ^{46.7}
 - An analytical result for soil sample TP-10 indicated concentrations of PCBs in excess of the NJDEP SCC. ^{2-2.5} ⁰⁻⁵⁶
 - An analytical result for soil sample TP-13 indicated concentrations of beryllium in excess of the NJDEP SCC. ^{1.5-2' or 4.5-7'} ^{3.3}
 - An analytical result for soil sample TP-31 indicated concentrations of arsenic in excess of the NJDEP SCC. ^{1-1.5} ^{37.9}

AOC #5 Black "tar-like" Substance

The limits of the area of the Black "tar-like" substance have been successfully identified and delineated.

1. A review of GC fingerprint analytical result revealed that the black tar like substance contained phenolic-base compound. No specific compound was identified in the GC fingerprint analysis.
2. The black "tar-like" substance was sampled for asbestos. The results did not indicate the presence of asbestos.
3. The black "tar-like" substance has been identified in approximately 22,012 square feet of the field. PMK recommends the excavation, removal and proper disposal of the black tar like substance from the area identified on Plate 6.
4. The visual classification sample collected by the NJDEP Emergency Response Team was verbally communicated to PMK and concluded the black "tar-like" substance was a petroleum based compound.
5. The Middlesex County Health Department collected two (2) samples from the black "tar-like" substance for PP+40. The analytical results indicated all targeted compounds were detected below the NJDEP SCC.

AOC #8 Asbestos Containing Material

The limits of the asbestos containing material have been successfully identified and delineated.

1. The ACM has been identified in approximately 90,000 square feet of field.
2. The results of the three (3) of four (4) bulk material samples collected from the embankment area of the dry pond confirmed the presence of asbestos, ranging from 6.3% to 15%. The other sample did not indicate the presence of asbestos.
3. PMK collected additional bulk material samples from selected test pits, which contained the similar material to the tiles in the dry pond area. The confirmatory bulk samples indicated the result of the eight (8) of nine (9) samples collected from test pits TP-1, TP-2, TP-6, TP-23, TP-24, and TP-28 indicated the presence of asbestos ranging from 10% to 18%. The other sample was collected from the black "tar-like" substance observed in TP-6. The results of the sample did not indicate the presence of asbestos.
4. The Middlesex County Health Department collected two (2) bulk material samples from the exposed tile in the embankment of the dry pond area. The analytical results indicated the presence of asbestos in both samples ranging from 24% to 26 %.

2.7 PREVIOUS RECOMMENDATIONS

On September 27, 2002, representatives of PMK, the Borough of South Plainfield, USEPA, NJDEP, Edison Wetland Association and Middlesex County Health Department gathered to discuss the future soil investigation and remediation activities at the Site. At this meeting, USEPA case manager, Mr. Pete Mannino, informed all interested parties that the PCB soil contamination found in surface soil investigation performed in late 1999 remained an area of concern. At the present time the USEPA is planning to perform further remedial investigation and feasibility studies (RI/FS) as a part of their operational Unit 3 (OU 3). Mr. Mannino also informed all interested parties that due to the lack of funding and the USEPA process the RI/FS study for the Site could not be completed in the next few months. Based on the information provided by the USEPA case manager, the RI/FS for the Site would take at least two to three years.

At the meeting, Borough of South Plainfield officials informed both regulatory agencies that the Borough of South Plainfield would like to open Veterans Memorial Park next spring, and would like to exercise an interim soil remediation measure until the USEPA OU 3 studies are completed. In the meeting the interim remedial action work plan measures were discussed with the NJDEP and USEPA representatives. The following interim remedial measures were proposed:

1. Excavation, removal and disposal of the unknown black substance.
2. Excavation, removal and disposal of the exposed asbestos tiles in the embankment area.
3. Encapsulation and fencing of the PCB contaminated area.

Interim Remedial Action Measures listed above were verbally approved by both of the regulatory agencies. The limits of PCB, ACM and black substance areas are identified on Plate 4.

2.8 AOC #4 - SOIL INVESTIGATIONS

At the request of the Borough of South Plainfield, PMK and Aurora mobilized on Site on August 12 and 13, 2002 to excavate PCB contaminated soil identified in soil samples R-1C, R-1D and R-1. The PCB investigations and limited remedial action revealed the following:

1. The findings of the USEPA investigation performed at the Site indicated that thirteen of the thirty-four surface soil samples collected from the Park for PCB analysis revealed concentrations in excess of the most stringent NJDEP SCC.
2. The results of the PMK SI revealed PCB contamination exceeded the NJDEP SCC in one (R-1) of eight samples (R-1 through R-8) collected along the northeast boundary of the park.
3. Limited remedial activities were conducted in the area of soil sample, R-1. Approximately one hundred twenty (120) cubic yards of PCB contaminated soil was excavated, stockpiled on 6 mil plastic sheeting and covered with the same on Site.
4. Twenty-five (25) post excavation soil samples were collected. Six (6) post excavation samples exhibited PCB concentration in excess of the NJDEP SCC.
5. PMK has been informed by the USEPA that the remedial actions to be performed in this area of concern will be investigated under the USEPA OU-3 in conjunction with the Cornell Dublier Superfund Site.

2.9 SITE INVESTIGATION REPORT ADDENDUM (JULY 7, 2003)

On January 7, 2003, PMK received a response from the NJDEP regarding the Site Investigation Report (SIR) and Remedial Action Workplan (RAW) that was submitted on November 15, 2003. Upon review of the SIR/RAW, the NJDEP issued a letter, dated January 7, 2003, requesting that surface soil samples be collected approximately every 30 feet along the proposed fence line for PCB analysis. In compliance with the NJDEP letter PMK conducted a surface soil investigation in accordance with N.J.A.C. 7:26E at Veterans Memorial Park., located in the Borough of South Plainfield, Middlesex County, New Jersey.

On May 29, 2003, a PMK representative was onsite to be collected the surface soil samples. Soil samples were collected utilizing a hand trowel. A total of twelve (12) surface samples, SS-1 through SS-12, were collected and forwarded to Chemtech Laboratories of Mountainside, NJ (NJ Lab Certification # 12013) for PCB analysis.

The laboratory analytical results for soil samples SS-1 through SS-12 revealed that all targeted compounds were either below the method detection limits (MDL) or ranged from 0.056 mg/kg to 0.33 mg/kg which are below the most stringent NJDEP SCC. These criteria are presented in the Soil Sampling Analytical Results Summary, Table 2. Please note that the Aroclor 1254 was the only PCB targeted compound that was detected above the MDL.

3.0 SCOPE OF SERVICES

Based upon the results of additional SI investigations conducted by PMK, USEPA investigations at the Site and the September 27, 2002 meeting between the Borough of South Plainfield, the NJDEP case manager, USEPA, Middlesex County Heath Department and Edison Wetland Association Representatives, PMK proposed the following interim remedial actions to address all pending issues identified at the Site. In order to facilitate the remedial actions proposed for the Site, PMK has broken the actions into four Phases, which area identified on Plate 2.

Phase I – Excavation of Black “tar-like” Substance

PMK has proposed the excavation, transportation and disposal of the black “tar-like” substance. The impacted area to be excavated covered approximately 22,016 square feet (ft²) and would be excavated to a depth of 4.5 feet below surface ground (bsg). The total volume estimated to be excavated was 3,667 cubic yards. During the excavation, visual observations would be performed to make sure that all of the black “tar-like” substance is removed. PMK proposed no post excavation sampling for this AOC. The area would be backfilled with certified clean fill.

Phase II – Excavation of Asbestos Tiles

PMK proposed the excavation of exposed asbestos tiles from the embankment of the dry pond area to approximately 25 feet from the embankment toward the Park in a north-northeast direction. The area would be backfilled with certified clean fill and the wetland vegetation would be restored as per the approved wetland mitigation plan. Once the NJDEP completes its investigation of the area PMK proposed to cover the area with a geotextile fabric and six to eight inches of certified clean fill to encapsulate this area. The area to be excavated is approximately 6,000 square feet (ft²) and would be excavated to an approximate depth of 4 to 6 feet bsg.

Upon completion of the USEPA OU3 investigations, PMK proposed encapsulation of the remaining visually and analytically identified ACM areas. PMK proposed encapsulation of the asbestos area with covering geotextile fabric and placement of 6-8” of certified clean soil. Subsequently, PMK recommended filing a deed restriction on the property implementing institutional controls.

Phase III – PCB contaminated areas

Based on the findings of the soil samples collected by PMK and the USEPA, it had been determined that PCB contamination exists on the northwestern side of the Site. The PCB contamination has been identified by the USEPA and is potentially connected with the Cornell Dublier Superfund Site, which is located approximately one-half mile up gradient and upstream of the Site. The USEPA case manger for the Cornell Dublier Site informed all interested parties that the USEPA OU3 is planning to perform RI/ FS investigation. However, it may take up to three years because of a lack of funding. Therefore, PMK proposes interim remedial measures to isolate, encapsulate and limit risk from PCBs. The interim measures proposed for this AOC are:

- 1) The PCB contamination found in the ball field and grass area would be isolated by the construction of a six foot chain link fence and signs would be posted to minimize hazard. To ensure the fence is located properly to close off impacted areas, PMK

proposed to collect surficial soil samples at a thirty (30) foot interval prior to erecting the fence. The soil samples would be collected from the zero to six inch interval along the proposed fence line. PMK is estimating that approximately nine to ten soil samples would be collected and analyzed for PCBs.

- 2) The PCB contamination found in the gravel parking lot would be encapsulated with 2-4" of asphalt to minimize hazard. The parking area would be connected to the park by widening the asphalt paved walking path. The Proposed Interim Remedial Actions and the approximate location of the soil samples are depicted on Plate 2.

Phase IV – Deed Restriction of Historic Fill

Based on the findings of the test pit investigation and geotechnical exploration conducted by PMK, it was concluded that low areas in the park were raised to the current grade through the use of non-indigenous fill from various sources. In order to address this issue, PMK proposed the use of Deed Restrictions, and the implementation of Institutional Controls.

4.0 REMEDIAL ACTION

On June 3, 2003 Clean Earth Environmental (CEE) of Winslow, New Jersey was retained by the Borough of South Plainfield to perform soil remediation activities identified in the October 18, 2002 Interim Remedial Action Workplan (IRAW) and the June 18, 2003 IRAW Addendum #1 prepared PMK. Remedial Activities on site were initiated on September 22, 2003 and continued until December 9, 2003. During remedial action activities CEE implemented health and safety program to protect employees working on site. All activities were photodocumented by PMK on-site personnel. A selection of these photographs is included as Appendix B.

Due to the complexity of the project, the RA was divided into multiple areas:

4.1 AREA I – BLACK "TAR LIKE" SUBSTANCE EXCAVATION

The excavation, transportation and disposal of the black "tar-like" substance began on October 8, 2003 and continued through October 22, 2003. The area of excavation covered approximately 16,756 square feet (ft²), reaching a depth of between three (3) and five (5) feet below the surface of the ground (bsg). Approximately 1,400 tons of "tar-like" material was removed from Area I. During the course of the excavation, multiple drums which appeared to be a source of the "tar-like" material were uncovered and disposed of off site. Furthermore, the originally defined limits of excavation were expanded to encompass additional material which was uncovered during the course of the remediation. A portion of this additional material was suspected ACM, which was segregated for later disposal. The "tar-like" material was stockpiled on site prior to being sent to Bayonne, NJ, or Philadelphia, PA for disposal. The total amount of material excavated from this area was approximately 1,350 tons.

During the excavation, visual observations were performed to ensure that all of the black "tar-like" substance was removed. The asphalt walkway removal was extended to encompass all of the areas which displayed evidence of "tar-like" material. Geotextile fabric (Mirafi 1160N/15/150) was laid under the bed of the former roadway, and was then covered with six

inches of topsoil. Grass seed was then applied to anchor the topsoil in place. Additionally, the surrounding area was searched multiple times for the presence of surface globules.

Due to the fact that the previous sample results did not indicate the presence of contamination in excess of the NJDEP Remediation Standards in the "tar-like" area, PMK proposed no post excavation sampling for this AOC. The excavation was backfilled with certified clean fill, the top six inches of which were topsoil. The area of excavation is depicted on Plate 3.

4.2 AREA II – ASBESTOS TILE EXCAVATION

Exposed asbestos tiles were excavated from within the embankment of the pond area. During the asbestos excavation and loading processes, technicians were retained by CEE to obtain air samples and to advise the supervisor on appropriate methods to manage asbestos safely. The area of excavation extended from the water line, approximately 30 feet back toward the Park in a north-northeast direction. The excavated area was approximately 6,000 square feet (ft²) and reached a maximum depth of 6 feet bsg. Excavated material from this area totaled approximately 300 tons. Visible asbestos was left in place on the Northern and Eastern walls of the excavation. Additionally, asbestos was visible below the waterline of the pond. Excavated asbestos was transported from the site by EPIC of Newark, NJ to the Taylor County Landfill, located in Mauk, GA.

The remediation was solely intended to eliminate the surface exposure of asbestos. Consequently, PMK proposed no post excavation sampling for this AOC. The area of excavation was backfilled with certified clean fill. The backfill was covered with six to eight inches of topsoil, in order to provide a viable environment for plant life. The wetland vegetation was restored as per the approved wetland mitigation plan. Excavation and load-out of the Asbestos Area lasted from September 30, 2003 through October 14, 2003.

The approximated limits of the asbestos excavation area and the areas to be isolated by the installation of the wire fence are depicted on Plate 3.

4.3 AREA III – PCB CONTAMINATED PARKING LOT AREA

PMK proposed interim remedial measures intended to isolate, encapsulate and limit risk from PCBs. During the course of the RA, CEE addressed the Parking Lot Area. The asphalt driveway was peeled up, and disposed of off site. Low and high points were identified in the topography of the parking lot. The area was then graded to prevent the pooling of rain water. Geotextile fabric (Mirafi 1160N/15/150) was laid on top of this smoothed surface. Six (6) inches of crushed stone were then spread over the fabric and rolled, in order to hold it in place. The Interim Remedial Actions are depicted on Plate 3.

4.4 DEVIATIONS FROM THE IRAW

During the course of the remediation, the Borough of South Plainfield requested that certain Remedial Actions be modified and that additional areas of the park be addressed. The Areas identified below were either not addressed in the IRAW, or were originally intended to be handled with areas of exclusionary fencing. Through the use of alternate remedial methodologies, these areas have been addressed as follows:

4.4.1 Area IV: Following NJDEP approval, the additional area identified on Plate 3, was excavated to a depth of between twelve and eighteen inches. Two areas, designated PCB 3 and PCB 4, had previously been identified as containing contaminant levels above NJDEP remediation standards. These areas were excavated to a depth of approximately three (3) feet, and post-excavation samples were taken. Post-excavation analytical results are summarized on the Analytical Results Summary (Table 2). During the course of the remediation, suspected ACM was uncovered in the area and segregated for appropriate disposal. Once the excavation was completed, geotextile fabric (Mirafi 1160N/15/150) was installed to cover the bottom of the excavation, with approximately six inches of fill material followed by six inches of topsoil. Grass seed was then applied to anchor the topsoil in place. The capped area was remediated from November 17, 2003 through December 9, 2003.

PCB contamination from this area had been excavated and stockpiled previously on the north-east portion of the site (Section 2.8). The PCB stockpile was loaded out from October 26, 2003 through October 29, 2003.

4.4.2 Area V & VI: The PCB contamination identified in the ball field area was excavated during October 20-21, 2003. PMK performed post-excavation soil sampling to confirm the removal of all of the soil which contained contaminants in excess of the NJDEP Remediation Standards. Four soil samples were collected from the sides of each excavation at 1.5-2.0' and submitted for PCB analysis. One bottom sample was collected from each excavation at approximately 3.0' and submitted for PCB analysis. Post-excavation analytical results are summarized on the Analytical Results Summary (Table 2). The excavations were backfilled with certified clean fill and brought back to grade with six inches of topsoil. Grass seed was then applied to anchor the topsoil in place.

4.4.3 Area VII: TP-31 displayed levels of Arsenic in excess of the NJDEP Remediation Standards. On October 16, 2003 this location was excavated, and approximately 25 cubic yards of material were removed. Four side and one bottom post-excavation samples were collected and analyzed for Arsenic contamination. None of the analyzed samples returned results in excess of the NJDEP Standards. Analytical results are summarized on the Analytical Results Summary (Table 2). The excavation was backfilled with certified clean fill and brought back to grade with six inches of topsoil. Grass seed was then applied to anchor the topsoil in place.

4.4.4 Area VIII: Patches of "tar-like" material were visible on the surface of the basketball court. Though divided from the main body of the park by the pole and wire strand fence, the Town of South Plainfield felt that it remained a hazard to children using the park. The basketball court, and approximately twelve inches of underlying material were removed. The subsurface was then covered with geotextile material (Mirafi 1160N/15/150), six inches of certified clean fill and six inches of topsoil returning the area to its original grade. Grass seed was then applied to anchor the topsoil in place.

Ms. Linda Range
NJDEP
February 12, 2004
Page 12

PMK Group #0502014-01

All soil samples which were collected using decontaminated stainless steel trowels in accordance with standard sampling protocol as detailed in the NJDEP Field Sampling Procedures Manual (May 1992). Volatile organic sample fractions were collected in accordance with the NJDEP Methodology for Field Extraction/Preservation of Soil Samples with Methanol for Volatile Organic Compounds (February 1997). The soil samples were subsequently placed in laboratory prepared sample jars and capped with Teflon-lined lids. The soil samples were transmitted to Chemtech Laboratories, Inc. (Chemtech) of Mountainside, New Jersey (NJ Lab Certification No. 12013). Standard Chain of Custody procedures were implemented to track the samples.

Field work was performed under the direct technical supervision of a representative from PMK. Our representative identified the sample locations in the field, maintained a continuous log of the explorations as the work proceeded, and supervised the soil sampling procedures to evaluate the surface and subsurface conditions. Post-excavation samples have been summarized in Table 1. Analytical results are summarized in Table 2, and presented as a whole in Attachment 3.

4.5 SOIL DISPOSAL

All waste manifests for the disposal of "tar-like," PCB and Asbestos Contaminated Material are included as Attachment 2.

4.6 CERTIFIED CLEAN FILL MATERIAL

The clean fill certification and soil description are included as Appendix A of this report.

4.7 DEED NOTICE

A copy of the draft deed notice for Areas IV and X is included as Appendix C of this report.

5.0 REMEDIATION COSTS

The cost associated with the project specifications and remediation, liquid waste disposal, backfill, engineering oversight, photo documentation, and reporting is approximately \$1,300,000.

6.0 POST-EXCAVATION SAMPLE RESULTS

Area IV – PCB contaminated areas

On October 21, 2003, samples PCB3-S1 through PCB3-S5 and PCB4-S1 through PCB4-S8 were analyzed for the presence of PCBs. Samples PCB3-S1 and PCB3-S2 returned PCB results in excess of the NJDEP Remediation Standards. All other sample results returned below the standard. Sample locations are identified on Plate 4.

Areas V and VI – PCB contaminated areas

On October 20, 2003, samples PCB1-S1 through PCB1-S5 and PCB2-S1 through PCB2-S5 were analyzed for the presence of PCBs. No contaminant concentrations above NJDEP Remediation Standards were detected. Sample locations are identified on Plate 4.

*no it's not
notified wrong
7/20/04*

Area VII – Arsenic Area

On October 16, 2003, samples TP31-S1 through TP31-S5 were analyzed for the presence of Arsenic. No contaminant concentrations above NJDEP Remediation Standards were detected. Sample locations are identified on Plate 4.

7.0 CERTIFICATIONS

In accordance with the requirements of N.J.A.C. 7:26E, a report submission Certification form is included as Appendix D.

8.0 SUMMARY OF REMEDIAL ACTION

Area I – Excavation of Black “tar-like” Substance

The area identified to contain the black “tar-like” material was excavated to a depth of between 3 and 5 feet until visually clean. The originally defined area was extended based upon materials encountered. The grassy area was repeatedly surveyed for further signs of “tar-like” material. The area of excavation was then backfilled with certified clean fill, the top six inches of which were topsoil.

Areas of the asphalt walkway affected by the “tar-like” material were removed along with six inches of underlying material. Geotextile fabric was laid in the footprint of the walkway, and the excavation was backfilled with topsoil.

Area II – Excavation of Asbestos Tiles

From the edge of the pond, back thirty feet, material was removed to a maximum depth of six feet. The area was backfilled with certified clean fill, and covered with six inches of topsoil. The final grade approximates the conditions originally existing on site.

Area III – PCB contaminated area

The parking lot area was regraded, overlain by geotextile fabric, and covered with six inches of gravel.

Area IV – Additional PCB Area

This additional area, identified by the Borough of South Plainfield for remediation, was excavated to a depth of between twelve and eighteen inches and capped with geotextile fabric, approximately six inches of certified clean fill and approximately six inches of topsoil.

Area V & VI – Additional PCB Areas

These additional areas were excavated and post-excavation samples were taken. The excavation was then backfilled to original grade with certified clean fill, the top six inches of which were topsoil.

Area VII – TP-31 Area

This additional area was excavated and post-excavation samples were taken. The excavation was then backfilled to original grade with certified clean fill, the top six inches of which were topsoil.

Area VIII – Basketball Court

The basketball court surface and backboards were removed in addition to 8-12 inches of underlying material. The area was then capped with geotextile fabric, approximately six inches of certified clean fill and approximately six inches of topsoil.

9.0 RECOMMENDATIONS

Area I – Excavation of Black “tar-like” Substance

The Black “tar-like” substance area has been excavated to visually clean. PMK recommends no further action for this area.

Area II – Excavation of Asbestos Tiles

All of the asbestos tiles within the designated area have been removed. However, asbestos remains in the subsurface of the surrounding area. PMK recommends no further action for this area.

Areas III Parking Lot Areas

The entire surface area of the Parking Lot has been encapsulated with the use of the geotextile material and gravel. This portion of the property is included in Area IX, as identified on Plate 5, and should be addressed with a deed restriction. A draft of the required Deed Restriction is included as Appendix C.

Area IV – Additional PCB Area

Any contaminated material remaining within this area has been encapsulated with a soil cap. Consequently, the wire fence, previously recommended to encapsulate this area has been rendered unnecessary. This portion of the property is included in Area IX, as identified on Plate 5, and should be addressed with a deed restriction. A draft of the required Deed Restriction is included as Appendix C.

Area V & VI – Additional PCB Areas

These additional areas were excavated and post-excavation samples were taken. The excavations were then backfilled to original grade with certified clean fill, the top six inches of which were topsoil. Consequently, the wire fence, previously recommended to encapsulate these areas has been rendered unnecessary. PMK recommends no further action for these areas.

Ms. Linda Range
NJDEP
February 12, 2004
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PMK Group #0502014-01

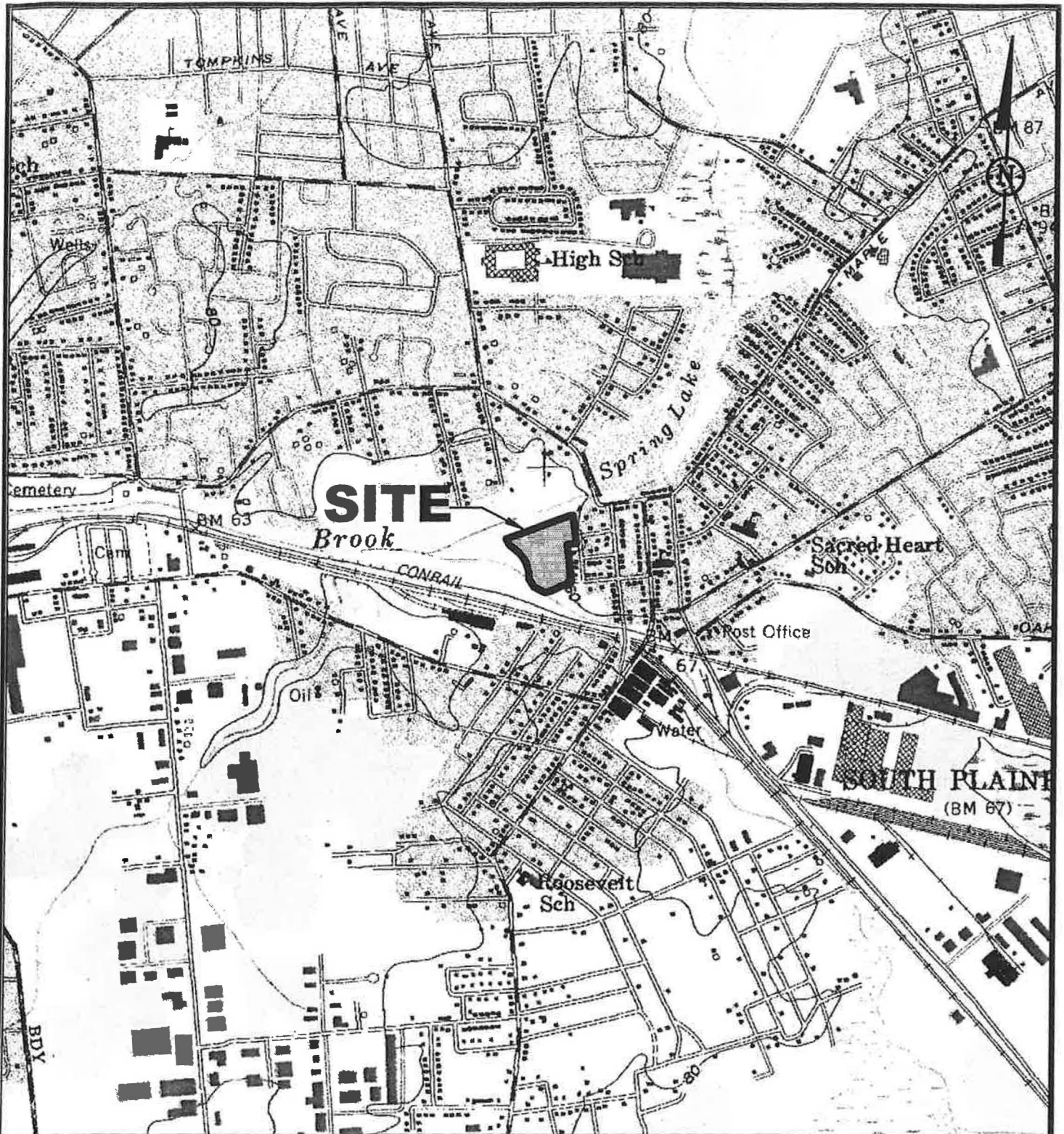
Area VII – TP-31 Area

This additional area was excavated and post-excavation samples were taken. The excavation was then backfilled to original grade with certified clean fill, the top six inches of which were topsoil. Consequently, the wire fence, previously recommended to encapsulate this area has been rendered unnecessary. PMK recommends no further action for this area.

Area VIII – Basketball Court

Any contaminated material remaining within this area has been encapsulated with a soil cap. This portion of the property is within Area X, as identified on Plate 5, and should be addressed following the US Environmental Protection Agency's investigation of the area.

never discussed in re: to TP 31



SITE LOCATION MAP

VETERANS MEMORIAL PARK
CHURCH STREET & KAINE AVENUE
BOROUGH OF SOUTH PLAINFIELD
MIDDLESEX COUNTY, NEW JERSEY

SOURCE:

U.S.G.S. TOPOGRAPHIC MAP
PLAINFIELD QUADRANGLE
1955 (PHOTO REVISED 1981)
CONTOUR INTERVAL: 20 FEET



65 Jackson Drive, Cranford, New Jersey 07016
(908) 497-8900 * Fax: (908) 497-9134 * www.PMKgroup.com
CERTIFICATE OF AUTHORIZATION #GA277039

DRAWN
BY: GH
CHECKED
BY: BD

PROJECT NO:

0502014-01

DATE:
01/07/04

SCALE:
1"=1,500'

PLATE NO.

1

TABLE 1
SITE SAMPLING SUMMARY
VETERANS MEMORIAL PARK
SOUTH PLAINFIELD, NEW JERSEY
PMK GROUP #0502014-01

Sample Number	Laboratory ID#	Date Collected	Sampling Depth (ft.)	Sample Parameters	Sampling Method
TP31-S1	R4687-01	10/16/2003	1.5-2.0	Arsenic	Trowel
TP31-S2	R4687-02		1.5-2.0		
TP31-S3	R4687-03		1.5-2.0		
TP31-S4	R4687-04		1.5-2.0		
TP31-S5	R4687-05		3.0-3.5		
PCB1-S1	R4687-06	10/20/2003	1.5-2.0	PCBs	
PCB1-S2	R4687-07		1.5-2.0		
PCB1-S3	R4687-08		1.5-2.0		
PCB1-S4	R4687-09		1.5-2.0		
PCB1-S5	R4687-10		3.0-3.5		
PCB2-S1	R4687-11		1.5-2.0		
PCB2-S2	R4687-12		1.5-2.0		
PCB2-S3	R4687-13		1.5-2.0		
PCB2-S4	R4687-14		1.5-2.0		
PCB2-S5	R4687-15		3.0-3.5		
PCB3-S1	R4754-01	10/21/2003	1.5-2.0		
PCB3-S2	R4754-02		1.5-2.0		
PCB3-S2DL	R4754-02		1.5-2.0		
PCB3-S3	R4754-03		1.5-2.0		
PCB3-S4	R4754-04		1.5-2.0		
PCB3-S5	R4754-05		3.0-3.5		
PCB4-S1	R4754-06		1.5-2.0		
PCB4-S2	R4754-07		1.5-2.0		
PCB4-S3	R4754-08		1.5-2.0		
PCB4-S4	R4754-09		1.5-2.0		
PCB4-S5	R4754-10		1.5-2.0		
PCB4-S6	R4754-11		1.5-2.0		
PCB4-S7	R4754-12		3.0-3.5		
PCB4-S8	R4754-13		3.0-3.5		

Legend

PCBs: Poly Chlorinated Biphenyls

TABLE 2
SOIL SAMPLING RESULTS SUMMARY
VETERANS MEMORIAL PARK
SOUTH PLAINFIELD, NJ
PMK GROUP #0502014-01

Sample No.	CASRN #	TP31-S1	TP31-S2	TP31-S3	TP31-S4	TP31-S5	Residential Direct Contact SCC (mg/kg)	Non-Residential Direct Contact SCC (mg/kg)	Impact to Ground water SCC (mg/kg)
Laboratory ID.#		R4687-01	R4687-02	R4687-03	R4687-04	R4687-05			
Date Collected		10/16/2003	10/16/2003	10/16/2003	10/16/2003	10/16/2003			
Sampling Depth (ft.)		1.5-2.0	1.5-2.0	1.5-2.0	1.5-2.0	3.0-3.5			
Metals Group 3									
Arsenic	7440-38-2	2.4	2.7	0.84J	1.2	3.2	20	20	--

Legend:

mg/kg: milligrams per kilogram

SCC: NJDEP Soil Cleanup Criteria

J: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

Concentration in excess of the most stringent NJDEP SCC

**TABLE 2(Cont.)
SOIL SAMPLING RESULTS SUMMARY
VETERANS MEMORIAL PARK
SOUTH PLAINFIELD, NJ
PMK GROUP #0502014-01**

Sample No.	CASRN #	PCB1-S1	PCB1-S2	PCB1-S3	PCB1-S4	PCB1-S5	Residential Direct Contact SCC (mg/kg)	Non-Residential Direct Contact SCC (mg/kg)	Impact to Ground water SCC (mg/kg)
Laboratory ID.#		R4687-06	R4687-07	R4687-08	R4687-09	R4687-10			
Date Collected		10/20/2003	10/20/2003	10/20/2003	10/20/2003	10/20/2003			
Sampling Depth (ft.)		1.5-2.0	1.5-2.0	1.5-2.0	1.5-2.0	3.0-3.5			
Volatile Organic Compounds (VOC), ug/kg									
Aroclor-1254	--	0.18	ND	0.042	0.026	ND	--	--	--
Aroclor-1260	--	ND	ND	0.044P	0.034P	ND	--	--	--
Total PCBs (Estimated)	1336-36-3	0.18	0	0.086P	0.06P	0	0.49	2	50

Legend:

mg/kg: milligrams per kilogram

SCC: NJDEP Soil Cleanup Criteria

ND: Not Detected above Laboratory Reported Detection Limits

P: This note is used for Pest/PCB target analyte when there is >25% difference for the detected concentrations between the two GC columns.

The lower of the two values is reported on Form 1 and Flagged with a "P".

Concentration in excess of the most stringent NJDEP SCC

TABLE 2 (Continued)
SOIL SAMPLING RESULTS SUMMARY
VETERANS MEMORIAL PARK
SOUTH PLAINFIELD, NJ
PMK GROUP #0502014-01

Sample No.	CASRN #	PCB2-S1	PCB2-S2	PCB2-S3	PCB2-S4	PCB2-S5	Residential Direct Contact SCC (mg/kg)	Non-Residential Direct Contact SCC (mg/kg)	Impact to Ground water SCC (mg/kg)
Laboratory ID.#		R4687-11	R4687-12	R4687-13	R4687-14	R4687-15			
Date Collected		10/20/2003	10/20/2003	10/20/2003	10/20/2003	10/20/2003			
Sampling Depth (ft.)		1.5-2.0	1.5-2.0	1.5-2.0	1.5-2.0	3.0-3.5			
Volatile Organic Compounds (VOC), ug/kg									
Aroclor-1254	--	0.022	0.04	ND	0.025P	ND	--	--	--
Aroclor-1260	--	ND	0.036P	ND	ND	ND	--	--	--
Total PCBs (Estimated)	1336-36-3	0.022	0.076P	0	0.025P	0	0.49	2	50

Legend: mg/kg: milligrams per kilogram

SCC: NJDEP Soil Cleanup Criteria

J: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

Concentration in excess of the most stringent NJDEP SCC

ND: Not Detected above Laboratory Reported Detection Limits

TABLE 3 (Continued)
SOIL SAMPLING RESULTS SUMMARY
VETERANS MEMORIAL PARK
SOUTH PLAINFIELD, NJ
PMK GROUP #0502014-01

Sample No.	CASRN #	PCB3-S1	PCB3-S2	PCB3-S2DL	PCB3-S3	PCB3-S4	PCB3-S5	Residential Direct Contact SCC (mg/kg)	Non-Residential Direct Contact SCC (mg/kg)	Impact to Ground water SCC (mg/kg)
Laboratory ID.#		R4754-01	R4754-02	R4754-02DL	R4754-03	R4754-04	R4754-05			
Date Collected		10/21/2003	10/21/2003	10/21/2004	10/21/2003	10/21/2003	10/21/2003			
Sampling Depth (ft.)		1.5-2.0	1.5-2.0	1.5-2.0	1.5-2.0	1.5-2.0	3.0-3.5			
Volatile Organic Compounds (VOC), ug/kg										
Aroclor-1248	--	0.527DP	0.5EP	0.549DP	0.045P	ND	0.028	--	--	--
Aroclor-1254	--	ND	ND	ND	ND	0.035	ND			
Aroclor-1260	--	0.075P	0.061P	ND	0.016J	ND	ND	--	--	--
Total PCBs (Estimated)	1336-36-3	0.602DP	0.61	0.549DP	0.061JP	0.035	0.028	0.49	2	50

Legend:

mg/kg: milligrams per kilogram

SCC: NJDEP Soil Cleanup Criteria

J: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

P: This note is used for Pest/PCB target analyte when there is >25% difference for the detected concentrations between the two GC columns.

The lower of the two values is reported on Form 1 and Flagged with a "P".

D: This identifies that the sample was analyzed at a secondary dilution factor.

E: Indicates that the analyte's concentration exceeds the calibrated range of the instrument.

Concentration in excess of the most stringent NJDEP SCC

ND: Not Detected above Laboratory Reported Detection Limits

TABLE 3 (Continued)
SOIL SAMPLING RESULTS SUMMARY
VETERANS MEMORIAL PARK
SOUTH PLAINFIELD, NJ
PMK GROUP #0502014-01

Sample No.	CASRN #	PCB4-S1	PCB4-S2	PCB4-S3	PCB4-S4	PCB4-S5	Residential Direct Contact SCC (mg/kg)	Non-Residential Direct Contact SCC (mg/kg)	Impact to Ground water SCC (mg/kg)
Laboratory ID.#		R4754-06	R4754-07	R4754-08	R4754-09	R4754-10			
Date Collected		10/21/2003	10/21/2003	10/21/2003	10/21/2003	10/21/2003			
Sampling Depth (ft.)		1.5-2.0	1.5-2.0	1.5-2.0	1.5-2.0	1.5-2.0			
Volatile Organic Compounds (VOC), ug/kg									
Aroclor-1254	--	0.06	0.031	0.025	0.032	0.028P	--	--	--
Aroclor-1260	--	ND	ND	0.021	0.022P	0.016JP	--	--	--
Total PCBs (Estimated)	1336-36-3	0.06	0.031	0.046	0.054P	0.044JP	0.49	2	50

Legend:

mg/kg: milligrams per kilogram

SCC: NJDEP Soil Cleanup Criteria

J: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

Concentration in excess of the most stringent NJDEP SCC

P: This note is used for Pest/PCB target analyte when there is >25% difference for the detected concentrations between the two GC columns.
The lower of the two values is reported on Form 1 and Flagged with a "P".

ND: Not Detected above Laboratory Reported Detection Limits

TABLE 3 (Continued)
SOIL SAMPLING RESULTS SUMMARY
VETERANS MEMORIAL PARK
SOUTH PLAINFIELD, NJ
PMK GROUP #0502014-01

Sample No.	CASRN #	PCB4-S6	PCB4-S7	PCB4-S8	Residential Direct Contact SCC (mg/kg)	Non-Residential Direct Contact SCC (mg/kg)	Impact to Ground water SCC (mg/kg)
Laboratory ID.#		R4754-11	R4754-12	R4754-13			
Date Collected		10/21/2003	10/21/2003	10/21/2003			
Sampling Depth (ft.)		1.5-2.0	3.0-3.5	3.0-3.5			
Volatile Organic Compounds (VOC), ug/kg							
Aroclor-1254	--	0.049P	ND	ND	--	--	--
Aroclor-1260	--	0.032P	ND	ND	--	--	--
Total PCBs (Estimated)	1336-36-3	0.081P	0	0	0.49	2	50

Legend:

ug/kg: micrograms per kilogram

SCC: NJDEP Soil Cleanup Criteria

P: This note is used for Pest/PCB target analyte when there is >25% difference for the detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and Flagged with a "P".

Concentration in excess of the most stringent NJDEP SCC

ND: Not Detected above Laboratory Reported Detection Limits



Ms. Linda Range
NJDEP
January 22, 2004

PMK Group #0502014-01

**APPENDIX A
CERTIFICATION OF CLEAN FILL**

TILCON-NJ**MILLINGTON QUARRY**

Fax 908.647.8222

STONEHOUSE ROAD • P.O. BOX 407 • MILLINGTON, N.J. 07948 • 908-580-3910

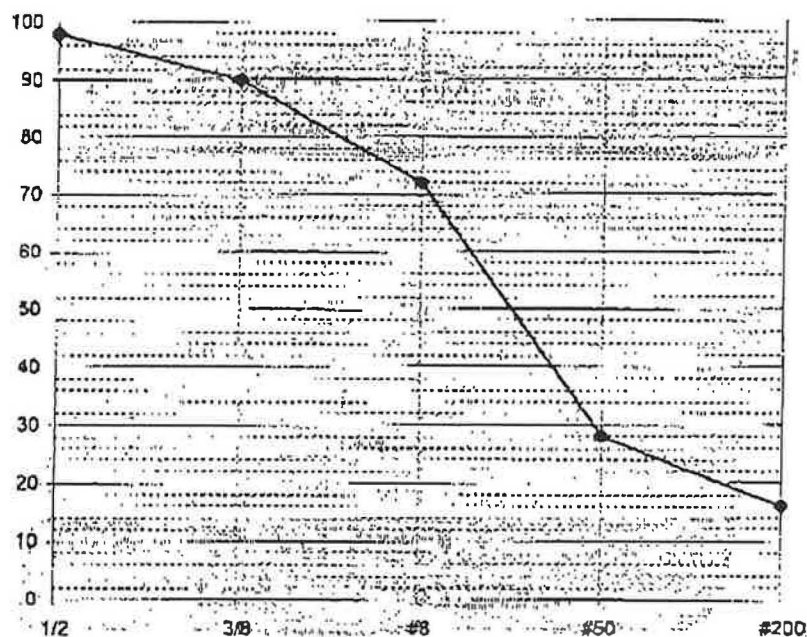
Typical Gradation, Minus 1/2"

Project	
VETERANS' MEMORIAL PARK SO. PLAINFIELD	

Contractor	
CLEAN EARTH ENVIRON. ATTN: BEN LEFF	

Sp. Gr	2.89
Loose	104
Rodded	123

	Typical % Pass	Prod. Target	
		Low	High
1/2	98		
3/8	90		
#8	72		
#50	28		
#200	16		



Tilcon Inc confirms that the Minus 1/2" available at Millington Quarry conforms to section 901 of the *New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction*. The material is defined as virgin stone mined at Millington Quarry, 407 Stonehouse Road, Block 164-Lot 4 Bernards Township, Somerset County. The material is identified on the job with Tilcon delivery tickets.

The unit weights and voids are for process control and should be verified by the contractor before use.

Asbestos • Lead • Environmental • Materials & Indoor Air Analysis

EMSL**EMSL Analytical**<http://www.emsl.com>

3 Cooper St.
Westmont, NJ 08108
Phone: (856) 858-4800
Fax: (856) 858-4571

Attention: Brent Peckis
Clean Earth Environmental Services
874 Piney Hollow Road - P.O. Box 156
Winslow, NJ 08095
Phone (609) 567-8140
Fax: (609) 567-6128

CVI - Topsoil

6/3/03

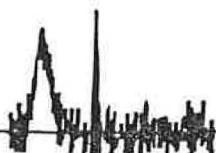
The following report covers the analysis performed on samples submitted to EMSL Analytical on 5/22/03. The results are tabulated on the attached data pages for the following client designated project:

The reference number for these samples is EMSL Order #010301230. Please use this reference when calling about these samples.

If you have any questions, please do not hesitate to contact me at (856) 858-4800.

Reviewed and Approved By:

Gerold J. Miller, Ph.D.
Laboratory Director
NJ-NELAP accredited: 04653



EMSL Analytical

3 Cooper St., Westmont, NJ 08108

Attn: Brent Peckis
Clean Earth Environmental Services
874 Piney Hollow Road - P.O. Box 156
Winslow, NJ 08095

Fax: (609) 567-6128

Phone: (609) 567-8140

Customer ID: INTE50

Customer PO:

Received: 05/22/03 12:30 PM

EMSL Order: 010301230

EMSL Project ID:

EMSL

Client Sample Description CVI-TOP-3 Comp

Lab ID: 0001

Test	Method	Parameter	Concentration	Units	Analysis Date/Time	Notes
Total Solids	2540B	Total Solids	88	%	5/22/03 03:00 PM	
Ammonia	350.2	Ammonia	<14.1	mg/Kg	5/23/03 09:00 AM	
TKN	351.3	Total Kjeldahl Nitrogen	480	mg/Kg	5/27/03 08:30 AM	
Phosphorus, Total	365.2M	Phosphorus	540	mg/Kg	5/23/03 03:30 PM	
Potassium, Total	6010B	Potassium	3880	mg/Kg	6/2/03 01:04 PM	
pH	9040B	pH	6.09	ph Units	5/27/03 04:47 PM	

EMSL Analytical, Inc.
Chemistry Lab
3 Cooper St., Westmont, NJ 08108
TEL: (856) 858-4800 FAX: (856) 858-4571

Chain of Custody / Analysis Request Form

EMSL Project # 010301230

Account Rep: LOH

Indicate State where samples collected:
NJ

Print ALL Information. Put N/A in blanks not applicable

REPORT RESULTS TO:		SEND INVOICE TO:		TURNAROUND TIME	
Name: <u>BRENT PECKIS</u>	Name:	PO#:	Date Results needed by: <u>72 HOURS</u>		
Company <u>CLEAN EARTH ENVIRON. SVCS.</u>	Company	<u>SAME</u>		Standard Turnaround Time is 10 working days <input type="checkbox"/>	
Address <u>P.O. Box 156</u>	Address	The following turnaround times require lab approval:			
City <u>WINSLOW</u>	City	<input type="checkbox"/> 4-5 days		<input checked="" type="checkbox"/> 72 Hrs <input type="checkbox"/> 48 Hrs	
State <u>NJ</u> ZIP <u>08095</u>	State	ZIP		<input type="checkbox"/> 24 Hrs Approved by	
TEL: <u>609-567-8140</u> FAX: <u>609-567-6128</u>	TEL:	FAX:			
Sampled by (Signature) <u>Blue</u>	# of Samples in Shipment: <u>1</u>	Date of Sample Shipment: <u>5-21-03</u>			

Failure to complete shaded areas will hinder processing of samples.				MATRIX				Method Preserved				Sampling		List Test Needed											
Sample Number	Station Location /Sample ID	COMP	GRAB	WATER	SOIL	AIR	SOLIDGE	OTHER	HCL	HNO3	H2SO4	ICE	OTHER	DAT	TIME	TOTAL NITROGEN	TOTAL PHOSPHORUS	INASSIV M	pH						
1. <u>CV1-Top-3</u>		<u>X</u>			<u>X</u>									<u>X</u>	<u>5/16/03</u>	<u>1610</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>				<u>30123</u>	
2.																									
3.																									
4.																									
5.																									
6.																									
7.	FedEx PRIORITY OVERNIGHT THU				<u>5/22/03 1:30PM Left message for Brent test may take extra day - PJ.</u>																				
8.	exp: 161816 21MAY03																								
9.	Deliver By: 22MAY03																								
10.	A1																								
RK# 8389 8387 7308 FORM 0215				PHL																					

Released By Signature <u>Blue</u>	Date & Time Released <u>5-21-03 1600</u>	Delivery Method <u>FED EX</u>	Received By Signature <u>Blue</u>	Agency <u>EMSL</u>	Date & Time Received <u>5/22/03 12:30PM</u>	Condition Noted <u>Ron Torg</u>
--------------------------------------	---	----------------------------------	--------------------------------------	-----------------------	--	------------------------------------

Comments: PHOSPHORUS (365.2) pH (7045)
INASSIV M (min)

Please indicate reporting requirements: ☒ 1. Results Only ☐ 2. Results and QC ☐ 3. Reduced Deliverables ☐ 4. Disk Deliverable

U.S. ENGINEERING LABS
443 COMMERCE LANE
W. BERLIN, N.J. 08091

USEL

13

CHAIN OF CUSTODY FORM

STATE AGENCY NJ NY PA CT DE OTHER

CLIENT	CLEAN EARTH ENV. SVCS.		
ADDRESS	P.O. Box 156		
CITY	WINSLOW		
STATE	NJ	ZIP	08095

PROJECT	MYERS SITE
CONTACT	BRENT PECKIS
PHONE	609 567 8140
FAX	609 567 6128

ALT SAMPLE #	FIELD ID	IC	MM	DATE/TIME SAMPLED	SAMPLE DESCRIPTION	ANALYSIS
	CVS-Top-01	S		5/1/03	TOPSOIL (COUNTRY VIEW)	GRAIN SIZE D-422 HYDROMETER MOISTURE CONTENT D2216 ATTERBERG D4318 PERMEABILITY ASTM D5084, METHOD A
	CHT-WET-01	S		5-1-03	WETLANDS SOIL (CEDAR HILL)	GRAIN SIZE MOISTURE CONTENT ATTERBERG LIMITS COMPACTION D-698 PERMEABILITY ASTM D5084, METHOD A HYDROMETER GRAPHIC COMPARISON OF COMPACTION VS. PERMEABILITY
M - MATRIX A - AQUEOUS S - SOIL SL - SLUDGE P - POTABLE WATER O - OIL F - FILTER SC - SOLID SCOT - FT						

NO. CONTAINERS	TURNAROUND: STD	(If Blank, Std. 3 weeks)
----------------	-----------------	--------------------------

DELIVERABLES (to client)	STD	REDUCED	FULL	OTHER
--------------------------	-----	---------	------	-------

DELIVERED BY		RECEIVED BY		ORGANIZATION	DATE	TIME	REASON
PRINT	SIGN	PRINT	SIGN				
PECKIS	BP						

PERSON(S) ASSUMING RESPONSIBILITY FOR SAMPLING: PRINT: PECKIS

SIGN: BP

COMMENTS	FAX RESULTS WHEN DONE	ALT QUOTE	
		ALT CASE #	
		P.O.#	10100-2621

**U.S. Engineering Laboratories, Inc.**

Client: Clean Earth Environmental Services, Inc.
Project: Myers Property
Material: CVI-Top-01, CHT-Wet-01, Top-01 Samples
Tests Performed: Hydrometer
Organic Content
Date: 5-21-03
Project No: W300016

Laboratory Analysis

<u>Sample ID</u>	<u>Percent Sand</u>	<u>Percent Silt</u>	<u>Percent Clay</u>	<u>Textural Classification</u>
CVI-Top-01	24.0	46.4	29.6	Clay Loam
CHT-Wet-01	30.0	42.4	27.6	Clay Loam
Wet-01	70.0	18.4	11.6	Sandy Loam
Top-01	30.4	40.3	29.3	Clay Loam

<u>Sample ID</u>	<u>Organic Content</u>
CVI-Top-01	3.6%
CHT-Wet-01	4.3%
Wet-01	9.9%
Top-01	8.9%

443 COMMERCE LANE, SUITE 1, WEST BERLIN, NEW JERSEY 08091

Telephone: 856.767.1000 Fax: 856.753.9720

California ☐ Washington ☐ Nevada ☐ Texas ☐ Illinois ☐ Pennsylvania ☐ New Jersey ☐ Virginia ☐
Florida

www.uslaboratories.com

If you have any questions or require further information please call me at the office.

Sincerely,



Michael Bottalico
Branch Manager

443 COMMERCE LANE, SUITE 1, WEST BERLIN, NEW JERSEY 08091

Telephone. 856.767.1000 Fax. 856.753.9720

California ☐ Washington ☐ Nevada ☐ Texas ☐ Illinois ☐ Pennsylvania ☐ New Jersey ☐ Virginia ☐
Florida

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139 North Iowa Avenue
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U.S. Engineering Laboratories, Inc.
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903 East Hazelwood Avenue
Rahway, NJ 07065
Tel: 732-382-3553 Fax: 732-382-8840

814 Parkway Boulevard
Broomall, PA 19008
Tel: 610-543-3925 Fax: 610-543-1933

Particle Size Distribution Report

Project: Myer Site Testing

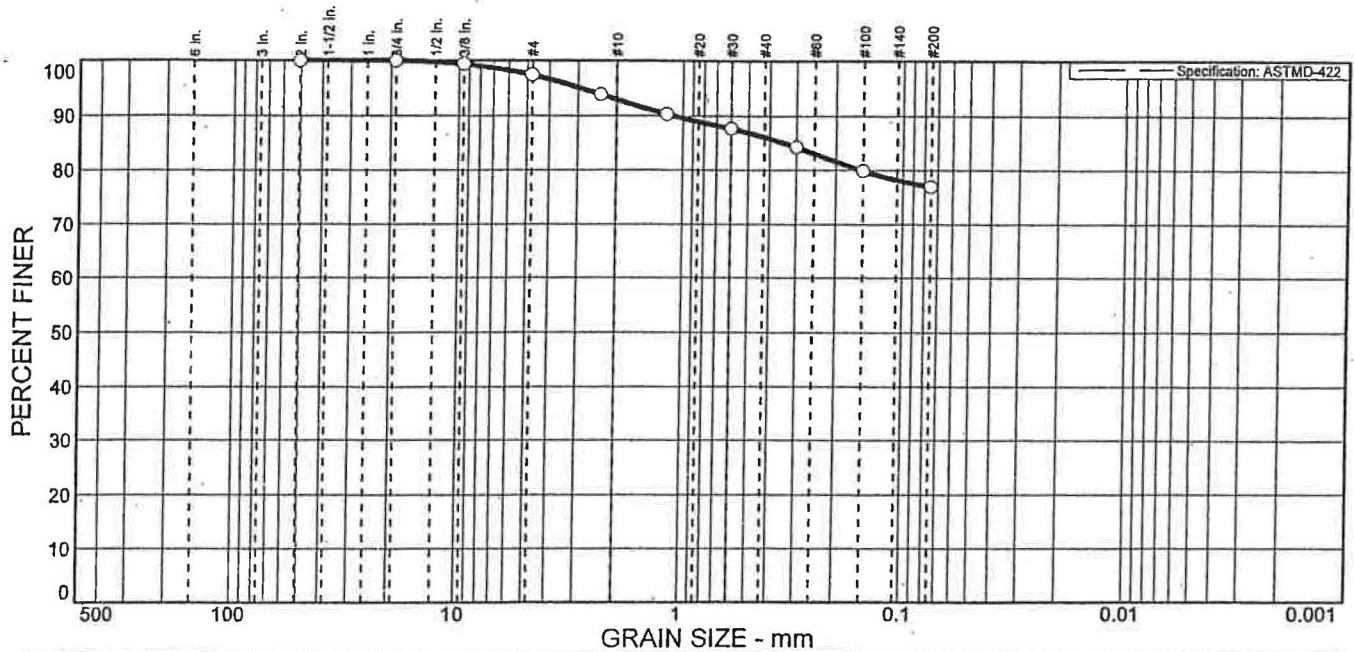
Project No.: W300016

Client: Clean Earth Environmental

Sample No:
Location: CVT-Top-01

Source of Sample:

Date: 5/7/03
Elev./Depth:



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	2.6	20.4	77.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2 in.	100.0		
3/4 in.	100.0		
3/8 in.	99.4		
#4	97.4		
#8	93.9		
#16	90.3		
#30	87.7		
#50	84.3		
#100	79.9		
#200	77.0		

* ASTM D-422

Soil Description		
Top-Soil		
Atterberg Limits		
PL= 26.09	LL= 32.5	PI= 6.41
Coefficients		
D ₈₅ = 0.338	D ₆₀ =	D ₅₀ =
D ₃₀ =	D ₁₅ =	D ₁₀ =
C _u =	C _c =	
Classification		
USCS=	AASHTO=	
Remarks		
Moisture = 21.1%		

Plate



ACCREDITED LABORATORIES, INC.

 20 PERSHING AVENUE
 CARTERET, NEW JERSEY 07008

PHONE (732) 541-2025 FAX (732) 541-1383

(12)

CHAIN OF CUSTODY FORM

STATE AGENCY NJ NY PA CT DE OTHER EPA

CLIENT	CLEAN EARTH ENV. SVCS.		
ADDRESS	P.O. Box 156		
CITY	WINSLOW NJ		
STATE	NJ	ZIP	08095

PROJECT	MYERS PROPERTY
CONTACT	BRENT PECKIS
PHONE	609 567 8140
FAX	609 567 6128

ALI SAMPLE #	FIELD ID	U	M	DATE/TIME SAMPLED	SAMPLE DESCRIPTION	ANALYSIS
0304100	CVI-TOP-01	2	S	5/1/03	CVI TOPSOIL (COUNTRY VIEW, INCL)	NJDEP UNRESTRICTED USE CRITERIA AND TCL VOLATILES TCL SEMI-VOLS TCL PESTS/PCB'S TAL METALS
						EPA CLP/SDW
* PLEASE TAKE NOTICE OF SAMPLING DATE IN RELATION TO HOLDING TIMES *						

M - MATRIX	A - AQUEOUS	S - SOIL	G - SLUDGE	P - POTABLE WATER	O - OIL	F - FILTER	S - SOLID	OTHER
------------	-------------	----------	------------	-------------------	---------	------------	-----------	-------

*C - NO CONTAINERS	TURNAROUND: 10 DAY FAXABLE	(If Blank, Std. 3 weeks)
--------------------	----------------------------	--------------------------

DELIVERABLES (circle one)	STD	REDUCED	FULL	OTHER	CLP I (NJ FULL)
---------------------------	-----	---------	------	-------	-----------------

REUNQUISHED BY		RECEIVED BY		ORGANIZATION	DATE	REASON
PRINT	SIGN	PRINT	SIGN			
Blair Peckis	<i>[Signature]</i>	Tosha [unclear]	<i>[Signature]</i>	ACCREDITED	5/1/03	45.1

PERSON(S) ASSUMING RESPONSIBILITY FOR SAMPLING: PRINT: BRECKIS	SIGN: <i>[Signature]</i>
--	--------------------------

COMMENTS: RETURN COOLER WITH (1) 8oz + (1) 4oz EMPTIES, WATCH M.D.L.'S IN RELATION TO PARAMETER CRITERIA LEVELS, <i>code 2/2</i>	ALICQUOT: WU2216 ALICASE: 9759 PCB: 9823-2621
--	---

ACCREDITED LABORATORIES, INC.
VOLATILE ORGANIC ANALYSIS DATA

CASE NUMBER 9759
 SAMPLE NUMBER 0304100
 DATA FILE >A2603
 CLIENT NAME CEES
 FIELD ID CVI-TOP-01

MATRIX Soil
 DILUTION FACTOR 1.0
 DATE EXTRACTED
 DATE ANALYZED 05/14/03
 ANALYZED BY ATEF

CAS #	COMPOUND	UG/KG	MDL	CAS #	COMPOUND	UG/KG	MDL
107028	Acrolein	U	30	108907	Chlorobenzene	U	6
107131	Acrylonitrile	U	10	630206	1,1,1,2-Tetrachloroethane	U	6
75718	Dichlorodifluoromethane	U	6	10330207	m,p-Xylene	U	12
74873	Chloromethane	U	6	100425	Styrene	U	6
75014	Vinyl Chloride	U	6	98828	Isopropylbenzene	U	6
74839	Bromomethane	U	6	75252	Bromoform	U	6
75003	Chloroethane	U	6	79545	1,1,2,2-Tetrachloroethane	U	6
75694	Trichlorofluoromethane	U	6	96184	1,2,3-Trichloropropane	U	6
75354	1,1-Dichloroethene	U	6	103651	n-Propyl benzene	U	6
75092	Methylene Chloride	9 B	6	108861	Bromobenzene	U	6
156605	trans-1,2-Dichloroethene	U	6	108478	1,3,5-Trimethylbenzene	U	6
75343	1,1-Dichloroethane	U	6	95498	2-Chlorotoluene	U	6
590207	2,2-Dichloropropane	U	6	106434	4-Chlorotoluene	U	6
156592	cis-1,2-dichloroethene	U	6	98066	tert-Butylbenzene	U	6
67663	Chloroform	U	6	95636	1,2,4-Trimethylbenzene	U	6
74975	Bromochloromethane	U	6	135988	sec-Butylbenzene	U	6
71556	1,1,1-Trichloroethane	U	6	99876	p-Isopropyltoluene	U	6
563586	1,1-Dichloropropene	U	6	541731	1,3-Dichlorobenzene	U	6
56235	Carbon Tetrachloride	U	6	106467	1,4-Dichlorobenzene	U	6
107062	1,2-Dichloroethane	U	6	104518	n-Butylbenzene	U	6
71432	Benzene	U	6	95501	1,2-Dichlorobenzene	U	6
79016	Trichloroethene	U	6	96128	1,2-Dibromo-3-Chloropropane	U	6
78875	1,2-Dichloropropane	U	6	120821	1,2,4-Trichlorobenzene	U	6
75274	Bromodichloromethane	U	6	87683	Hexachlorobutadiene	U	6
74953	Dibromomethane	U	6	87616	1,2,3-Trichlorobenzene	U	6
10061015	cis-1,3-dichloropropene	U	6	95476	o-Xylene	U	6
108883	Toluene	U	6	75150	Carbon disulfide	U	6
10061026	trans-1,3-Dichloropropene	U	6	110758	2-Chloroethylvinylether	U	6
79005	1,1,2-Trichloroethane	U	6	1634044	Methyl t-butyl ether	U	60
142289	1,3-dichloropropane	U	6	67641	Acetone	U	6
127184	Tetrachloroethene	9	6	108054	Vinyl acetate	U	6
124481	Dibromochloromethane	U	6	789333	2-Butanone	U	6
106934	1,2-Dibromoethane	U	6	108101	4-Methyl-2-pentanone	U	6
100414	Ethylbenzene	U	6	591786	2-Hexanone	U	6

SURROGATE COMPOUNDS	RECOVERY	LIMITS	STATUS
1,2-Dichloroethane-d4	115 %	70-121	OK
Toluene-d8	93 %	81-117	OK
Bromofluorobenzene	82 %	74-121	OK

Percent solid of 83.2 is used for all target compounds.

J - Indicates compound concentration found below MDL.
 U - Indicates compound analyzed for but not detected,
 D - Indicates result is based on a dilution.
 I - Result exceeds industrial surface soil standards.*

B - Indicates compound found in associated blank.
 E - Indicates result exceeds highest calibration standard
 R - Result exceeds residential surface soil standards.*

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CVI-TOP-01

Lab Name: ACCREDITED LABS INC. Contract: _____

Lab Code: _____ Case No.: 9759 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 0304100

Sample wt/vol: 30 (g/ml) G Lab File ID: E2909.D

Level: (low/med) LOW Date Received: _____

% Moisture: 16.8 decanted: (Y/N) N Date Extracted: 5/9/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/12/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
000062-75-9	N-Nitrosodimethylamine	400	U
108-95-2	Phenol	400	U
111-44-4	bis(2-Chloroethyl)ether	400	U
95-57-8	2-Chlorophenol	400	U
541-73-1	1,3-Dichlorobenzene	400	U
106-46-7	1,4-Dichlorobenzene	400	U
100-51-6	Benzyl alcohol	400	U
95-50-1	1,2-Dichlorobenzene	400	U
95-48-7	2-Methylphenol	400	U
108-60-1	bis(2-chloroisopropyl)ether	400	U
106-44-5	3&4-Methylphenol	400	U
621-64-7	N-Nitroso-di-n-propylamine	400	U
67-72-1	Hexachloroethane	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	400	U
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
000065-85-0	Benzoic Acid	2000	U
111-91-1	bis(2-Chloroethoxy)methane	400	U
120-83-2	2,4-Dichlorophenol	400	U
120-82-1	1,2,4-Trichlorobenzene	400	U
91-20-3	Naphthalene	400	U
106-47-8	4-Chloroaniline	400	U
87-68-3	Hexachlorobutadiene	400	U
59-50-7	4-Chloro-3-methylphenol	400	U
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	400	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	400	U
131-11-3	Dimethylphthalate	400	U
208-96-8	Acenaphthylene	400	U
99-09-2	3-Nitroaniline	400	U
83-32-9	Acenaphthene	400	U
51-28-5	2,4-Dinitrophenol	400	U
100-02-7	4-Nitrophenol	49	JB

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CVI-TOP-01

Lab Name: ACCREDITED LABS INC. Contract: _____

Lab Code: _____ Case No.: 9759 SAS No.: _____ SDG No.: _____

Matrix: (soil/water) SOIL Lab Sample ID: 0304100

Sample wt/vol: 30 (g/ml) G Lab File ID: E2909.D

Level: (low/med) LOW Date Received: _____

% Moisture: 16.8 decanted: (Y/N) N Date Extracted: 5/9/03

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 5/12/03

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
132-64-9	Dibenzofuran	400	U	
606-20-2	2,6-Dinitrotoluene	400	U	
121-14-2	2,4-Dinitrotoluene	400	U	
84-66-2	Diethylphthalate	400	U	
7005-72-3	4-Chlorophenyl-phenylether	400	U	
86-73-7	Fluorene	400	U	
100-01-6	4-Nitroaniline	400	U	
534-52-1	4,6-Dinitro-2-methylphenol	400	U	
000086-74-8	Carbazole	400	U	
86-30-6	n-Nitrosodiphenylamine	400	U	
101-55-3	4-Bromophenyl-phenylether	400	U	
118-74-1	Hexachlorobenzene	400	U	
87-86-5	Pentachlorophenol	400	U	
85-01-8	Phenanthrene	400	U	
120-12-7	Anthracene	400	U	
84-74-2	Di-n-butylphthalate	400	U	
206-44-0	Fluoranthene	56	J	
129-00-0	Pyrene	45	J	
85-68-7	Butylbenzylphthalate	400	U	
91-94-1	3,3'-Dichlorobenzidine	400	U	
56-55-3	Benzo[a]anthracene	400	U	
117-81-7	bis(2-Ethylhexyl)phthalate	200	J	
218-01-9	Chrysene	400	U	
117-84-0	Di-n-octylphthalate	400	U	
205-99-2	Benzo[b]fluoranthene	400	U	
207-08-9	Benzo[k]fluoranthene	400	U	
50-32-8	Benzo[a]pyrene	400	U	
193-39-5	Indeno[1,2,3-cd]pyrene	400	U	
53-70-3	Dibenz[a,h]anthracene	400	U	
191-24-2	Benzo[g,h,i]perylene	400	U	

ACCREDITED LABORATORIES, INC.
INORGANIC ANALYSIS DATA SHEET

Case #: 9759
Sample #: 0304100
Field ID: CVI-TOP-01
Client Name: CEES

Matrix: Soil
Date Received: 05/08/03

CAS No.	Element	Result MG/KG	MDL MG/KG	Dilution Factor	Method	Date Analyzed
7429-90-5	Aluminum	21700	75.6	5	P	05/14/03
7440-36-0	Antimony	ND	1.51	1	P	05/13/03
7440-38-2	Arsenic	4.43	1.51	1	P	05/13/03
7440-39-3	Barium	148	1.13	1	P	05/13/03
7440-41-7	Beryllium	1.15	.378	1	P	05/13/03
7440-43-9	Cadmium	ND	.378	1	P	05/13/03
7440-70-2	Calcium	2550	18.9	1	P	05/13/03
7440-47-3	Chromium	21.5	.756	1	P	05/13/03
7440-48-4	Cobalt	10.4	.756	1	P	05/13/03
7440-50-8	Copper	17.6	.756	1	P	05/13/03
7439-89-6	Iron	21800	37.8	5	P	05/14/03
7439-92-1	Lead	33.5	3.78	1	P	05/13/03
7439-95-4	Magnesium	4250	18.9	1	P	05/13/03
7439-96-5	Manganese	1150	1.13	1	P	05/13/03
7439-97-6	Mercury	ND	.240	1	CV	05/13/03
7440-02-0	Nickel	26.0	1.51	1	P	05/13/03
7440-09-7	Potassium	2070	94.5	5	P	05/14/03
7782-49-2	Selenium	ND	1.51	1	P	05/13/03
7440-22-4	Silver	ND	.378	1	P	05/13/03
7440-23-5	Sodium	408	18.9	1	P	05/13/03
7440-28-0	Thallium	ND	1.51	1	P	05/13/03
7440-62-2	Vanadium	31.8	1.13	1	P	05/13/03
7440-66-6	Zinc	79.9	7.56	1	P	05/13/03

Percent Solid of 83.2 is used for all target elements

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by Cold Vapor

F - Analyzed by GFA

A - Analyzed by flame AA

ACCREDITED LABORATORIES, INC.
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 9759
Sample #: 0304100
Client Name: CEES
Field Number: CVI-TOP-01

Matrix: Soil
Date Received: 05/08/03
% Moisture: 16.8

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD RESULTS	BLANK MDL	ANALYSIS DATE
Solids, Percent	83.2	0.10	%	1.			05/13/03
Cyanide, Total	ND	0.90	mg/Kg	1.	ND	0.01	05/20/03

ACCREDITED LABORATORIES, INC
PESTICIDE/PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9759	MATRIX	Soil
SAMPLE NUMBER	030A100	DILUTION FACTOR	1
DATA FILE	>G8208	DATE EXTRACTED	05/09/03
CLIENT NAME	CSES	DATE ANALYZED	05/16/03
FIELD ID	CVI-TOP-01	ANALYZED BY	PHIL

CAS#	COMPOUND	UG/KG	MDL
319846	A-BHC	.951	.801
319857	B-BHC	U	.801
58899	G-BHC (Lindane)	U	.801
319868	D-BHC	U	.801
76448	Heptachlor	U	.801
309002	Aldrin	U	.801
1024573	Heptachlor Epoxide	.541 J	.801
959988	Endosulfan I	U	.801
5103719	A-Chlordane	U	.801
5103742	G-Chlordane	U	.801
60571	Dieldrin	U	1.60
72559	4,4'-DDE	U	1.60
72208	Endrin	U	1.60
33213659	Endosulfan II	U	1.60
72548	4,4'-DDD	U	1.60
7421934	Endrin Aldehyde	U	1.60
1031078	Endosulfan Sulfate	U	1.60
50293	4,4'-DDT	U	1.60
53494705	Endrin Ketone	U	1.60
72435	Methoxychlor	U	8.01
8001352	Toxaphene	U	40.1
12674112	Aroclor-1016	U	20.0
11104282	Aroclor-1221	U	20.0
11141165	Aroclor-1232	U	20.0
53469219	Aroclor-1242	U	20.0
12672296	Aroclor-1248	U	20.0
11097691	Aroclor-1254	U	20.0
11096825	Aroclor-1260	U	20.0


Percent Solid of 83.2 is used for all target compounds.


B - Indicates compound found in associated blank.
J - Indicates compound concentration found below MDL.
U - Indicates compound analyzed for but not detected.
E - Indicates result exceeds highest calibration standard.
D - Indicates result is based on a dilution.
R - Result exceeds residential surface soil standards.*
I - Result exceeds industrial surface soil standards.*

* Flags are based on New Jersey Soil Cleanup from Site
Remediation News Volume 06 Number 1.

2038-042

WASTE STREAM T

	MYERS PROPERTY SITE
	BRENT PECKIS
	609 567 8140
	567 6128

	
	10/04-2621

WASTE STREAM TECHNOLOGY, INC.

302 Grote Street
Buffalo, NY 14207
(716) 876-5290

Analytical Data Report

Report Date : 06/11/03
Group Number : 2038-042

Prepared For :
Mr. Brent Peckis
Clean Earth Environmental Services
P.O. Box 156
Winslow, NJ 08095
Fax: 609-567-6128

Site : Myers Property Site

Analytical Parameters

Gamma Spec
Micro R Scan


**Analytical Services
Number of Samples**

2
2

Turnaround Time

5 Business Days
5 Business Days

Report Released By :


Brian S. Schepart, Ph.D., Laboratory Director

ENVIRONMENTAL LABORATORY ACCREDITATION CERTIFICATION NUMBERS
NYSDOH ELAP #11179 NJDEPE #73977



Page 1 of ____



Waste Stream Technology, Inc.

302 Grote Street
Buffalo, NY 14207
(716) 876-5290

Analytical Data Report

Group Number: 2038-042

Site: Myers Property Site

Field and Laboratory Information

WST ID	Client ID	Matrix	Date Sampled	Date Received	Time
WT19048	CHT-Wet-05	Soil	05/27/03	05/28/03	10:50
WT19049	CVI-Top-3	Soil	05/16/03	05/28/03	10:50

RADIOCHEMISTRY DATA QUALIFIERS

- <MDA -** Indicates compound was analyzed for but determined to be below Minimum Detectable Activity.
- J -** Indicates an estimated value based on the sample tracer, the associated matrix spike or the Lab Control Sample.
- R -** Indicates data that is unacceptable based on the sample tracer, the associated matrix spike, or the Lab Control Sample.
- NJ -** Indicates an estimated value based on the Normalized Absolute Difference between the sample and sample duplicate or the sample and the blank.
- NR -** Indicates an unacceptable value based on the Normalized Absolute Difference between the sample and sample duplicate or the sample and the blank.

**Waste Stream Technology, Inc.**

302 Grote Street

Buffalo, NY 14207

Phone: (716) 876-5290

Fax: (716) 876-2412

Site / Project: Myers Property Site
 Group Number: 2038-042
 WST ID: WT19049

Client Sample ID: CVI-Top-3
 Collection Date: 5/16/03
 Receipt Date: 5/28/03
 Matrix: Soil

Analyses	Result \pm 2 Sigma	Limit	Qual	Units	DF	Analyzed
Micro R Scan	Method:					Analyst: MB
Micro R Scan	8.69			uR	1	6/9/03
Total Gamma Spec In Soil	Method: 901.1					Analyst: MB
Total Gamma Spec in Soil	1.45E-01 \pm 1.2	2.0E-02		uCi/kg	1	6/10/03

Qualifiers: <MDA - Analyte detected below quantitation limits.

J - Recovery results outside control limits. Data deemed estimated.

R - Analyte detected below quantitation limits. Data results deemed unacceptable.

NJ - Normalized Absolute Difference outside control limits. Data deemed estimated.

NR - Normalized Absolute Difference outside warning limits. Data deemed unacceptable.

EMSL Analytical

<http://www.emsl.com>

3 Cooper St.
Westmont, NJ 08108
Phone: (856) 858-4800
Fax: (856) 858-4571

Attention: Brent Peckis
Clean Earth Environmental Services
874 Piney Hollow Road - P.O. Box 156
Winslow, NJ 08095
Phone (609) 567-8140
Fax: (609) 567-6128

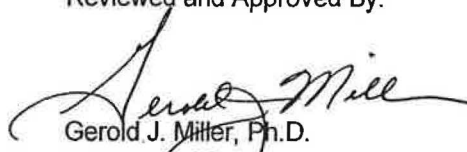
6/3/03

The following report covers the analysis performed on samples submitted to EMSL Analytical on 5/22/03. The results are tabulated on the attached data pages for the following client designated project:

The reference number for these samples is EMSL Order #010301230. Please use this reference when calling about these samples.

If you have any questions, please do not hesitate to contact me at (856) 858-4800.

Reviewed and Approved By:


Gerold J. Miller, Ph.D.
Laboratory Director
NJ-NELAP accredited: 04653

EMSL Analytical

3 Cooper St., Westmont, NJ 08108

EMSL

Attn: Brent Peckis
Clean Earth Environmental Services
874 Piney Hollow Road - P.O. Box 156
Winslow, NJ 08095

Fax: (609) 567-6128

Phone: (609) 567-8140

Customer ID: INTE50

Customer PO:

Received: 05/22/03 12:30 PM

EMSL Order: 010301230

EMSL Project ID:

Client Sample Description CVI-TOP-3 Comp

Lab ID: 0001

<i>Test</i>	<i>Method</i>	<i>Parameter</i>	<i>Concentration</i>	<i>Units</i>	<i>Analysis Date/Time</i>	<i>Notes</i>
Total Solids	2540B	Total Solids	88	%	5/22/03 03:00 PM	
Ammonia	350.2	Ammonia	<14.1	mg/Kg	5/23/03 09:00 AM	
TKN	351.3	Total Kjeldahl Nitrogen	480	mg/Kg	5/27/03 08:30 AM	
Phosphorus, Total	365.2M	Phosphorus	540	mg/Kg	5/23/03 03:30 PM	
Potassium, Total	6010B	Potassium	3880	mg/Kg	6/2/03 01:04 PM	
pH	9040B	pH	6.09	ph Units	5/27/03 04:47 PM	

EMSL Analytical, Inc. Chemistry Lab 3 Cooper St., Westmont, NJ 08108 TEL: (856) 858-4800 FAX: (856) 858-4571	Chain of Custody / Analysis Request Form Print ALL Information. Put N/A in blanks not applicable	EMSL Project # <u>010301230</u> Account Rep: <u>LOH</u> Indicate State where samples collected: <u>NJ</u>
--	--	--

REPORT RESULTS TO:		SEND INVOICE TO:		TURNAROUND TIME	
Name: <u>BRENT PECKIS</u>	Name:	PO#:	Date Results needed by: <u>72 HOURS</u>		
Company: <u>CLEAN EARTH ENVIRON. SUCS.</u>	Company: <u>SAME</u>		Standard Turnaround Time is 10 working days <input type="checkbox"/>		
Address: <u>P.O. Box 156</u>	Address:		The following turnaround times require lab approval:		
City: <u>WINSLOW</u>	City:		<input type="checkbox"/> 4-5 days <input checked="" type="checkbox"/> 72 Hrs <input type="checkbox"/> 48 Hrs		
State: <u>NJ</u> ZIP: <u>08095</u>	State: ZIP:		<input type="checkbox"/> 24 Hrs Approved by		
TEL: <u>609-567-8140</u> FAX: <u>609-567-6128</u>	TEL: FAX:				
Sampled by (Signature): <u>[Signature]</u>	# of Samples in Shipment: <u>1</u>		Date of Sample Shipment: <u>5-21-03</u>		

Failure to complete shaded areas will hinder processing of samples.					MATRIX					Method Preserved					Sampling		List Test Needed						
Sample Number	Station Location /Sample ID	COMP	GRAB		W A T E R	S O I L	A I R	S L U D G E	O T H E R	H C L	H N O 3	H 2 S O 4	I C E	O T H E R	D A T E	T I M E	T O T A L N I T R O G E N	T O T A L P H O S P H O R U S	P O T A S S I U M	P H			
1.	CVI-Top-3	X				X								X	5/16/03	1610	X	X	X	X			301230
2.																							
3.																							
4.																							
5.																							
6.																							
7.																							
FedEx PRIORITY OVERNIGHT THU emp: 161816 21MAY03 Deliver By: 22MAY03 RK# 8389 8387 7308 FORM 0215 PHI A1					5/22/03 1:30PM Left message for Brent test may take extra day - PJ.																		
Released By Signature: <u>[Signature]</u>		Date & Time Released: <u>5-21-03 1600</u>		Delivery Method: <u>FED EX</u>		Received By Signature: <u>[Signature]</u>		Agency: <u>EMSL</u>		Date & Time Received: <u>5/22/03 12:30PM</u>		Condition Noted: <u>Rom Teng</u>											

Comments: PHOSPHORUS (365.2) pH (9045)

Please indicate reporting requirements: ☒ 1. Results Only ☐ 2. Results and QC ☐ 3. Reduced Deliverables ☐ 4. Disk Deliverable

POTASSIUM (6010)

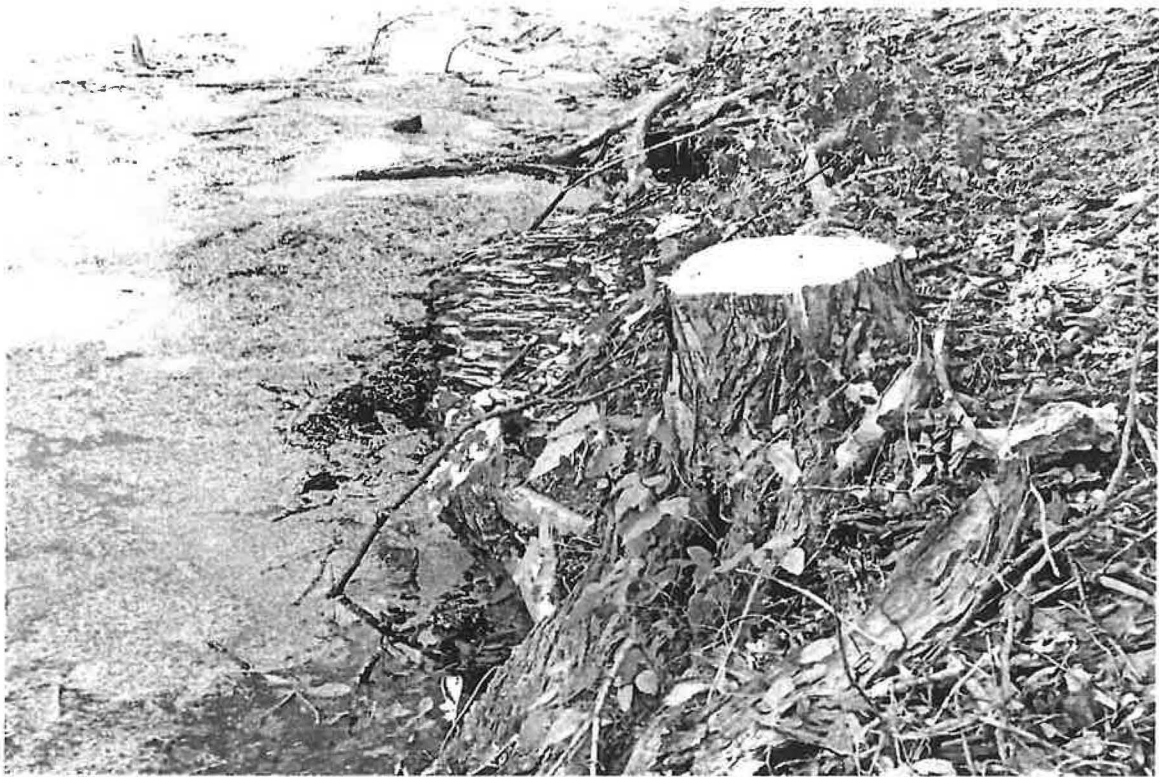
APPENDIX B PHOTODOCUMENTATION



Silt Fence Installation



Filter Fabric Covering Sewer Grates



Asbestos Exposure Pre-Excavation



Asbestos Exposed During Excavation



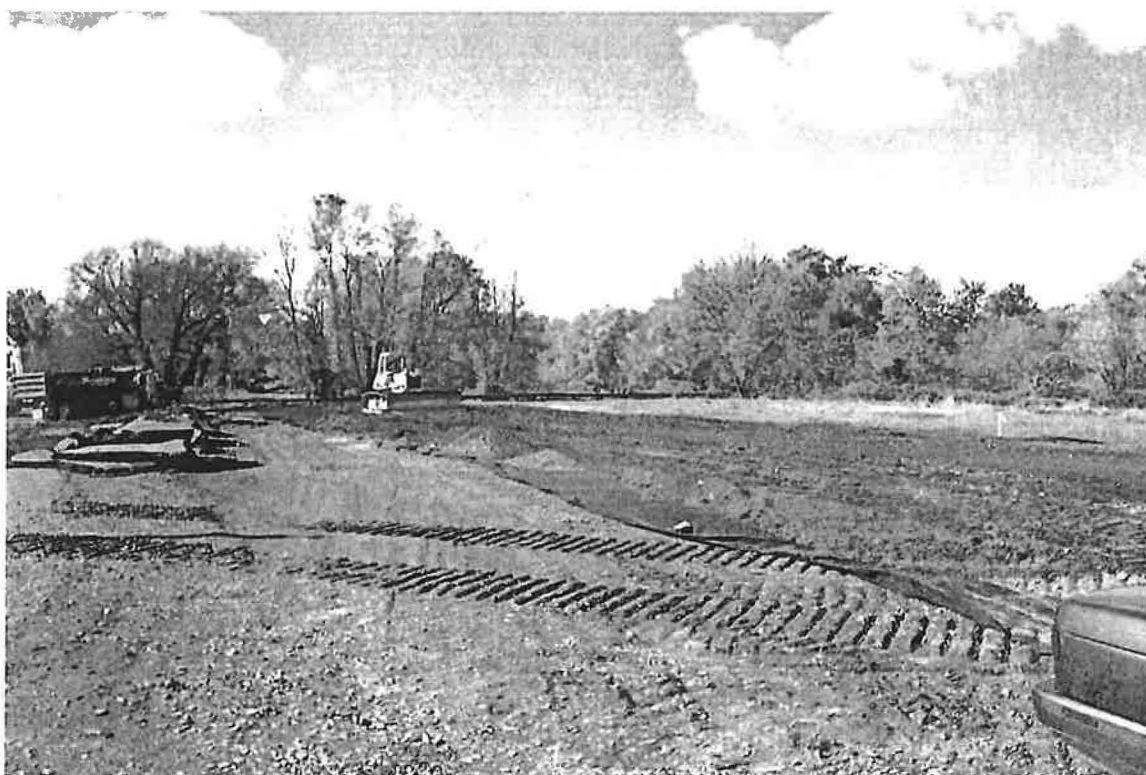
Asbestos Area Backfilling



Asbestos Area Backfilled



Asphalt Removal From Parking Lot Area



Filter Fabric and Cap of Parking Lot Area



Excavation in "tar-like" Area



Drums of Material From "tar-like" Area



Loading Material From "tar-like" Area

**APPENDIX C
DRAFT DEED NOTICE**

APPENDIX D
N.J.A.C. CERTIFICATION

CERTIFICATIONS
N.J.A.C. 7:26C-1.2 et seq.

Any person making a submission to the Department required by this chapter and pursuant to N.J.A.C. 7:26E, shall include the following signature and notarized certification, for each technical submittal. Additionally, the certification shall indicate the case name and address, case number, type of documents submitted, e.g., Remedial Action Report, for each technical submittal.

TYPE OF DOCUMENT: REMEDIAL ACTION REPORT
CASE NAME: VETERANS MEMORIAL PARK
CASE ADDRESS: CHURCH STREET & KAINE AVENUE
SOUTH PLAINFIELD, NJ
CASE NUMBER: 01-08-07-1845-23

The following certification shall be signed by:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively, or;
3. For a municipality, State, Federal or other public agency, by either a principal executive officer or ranking elected official.
4. For persons other than 1 through 3 above, by the person with legal responsibility for the site.

"I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement that I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties."

Printed Name DANIEL J. GALLAGHER

Title Mayor

Signature [Signature]

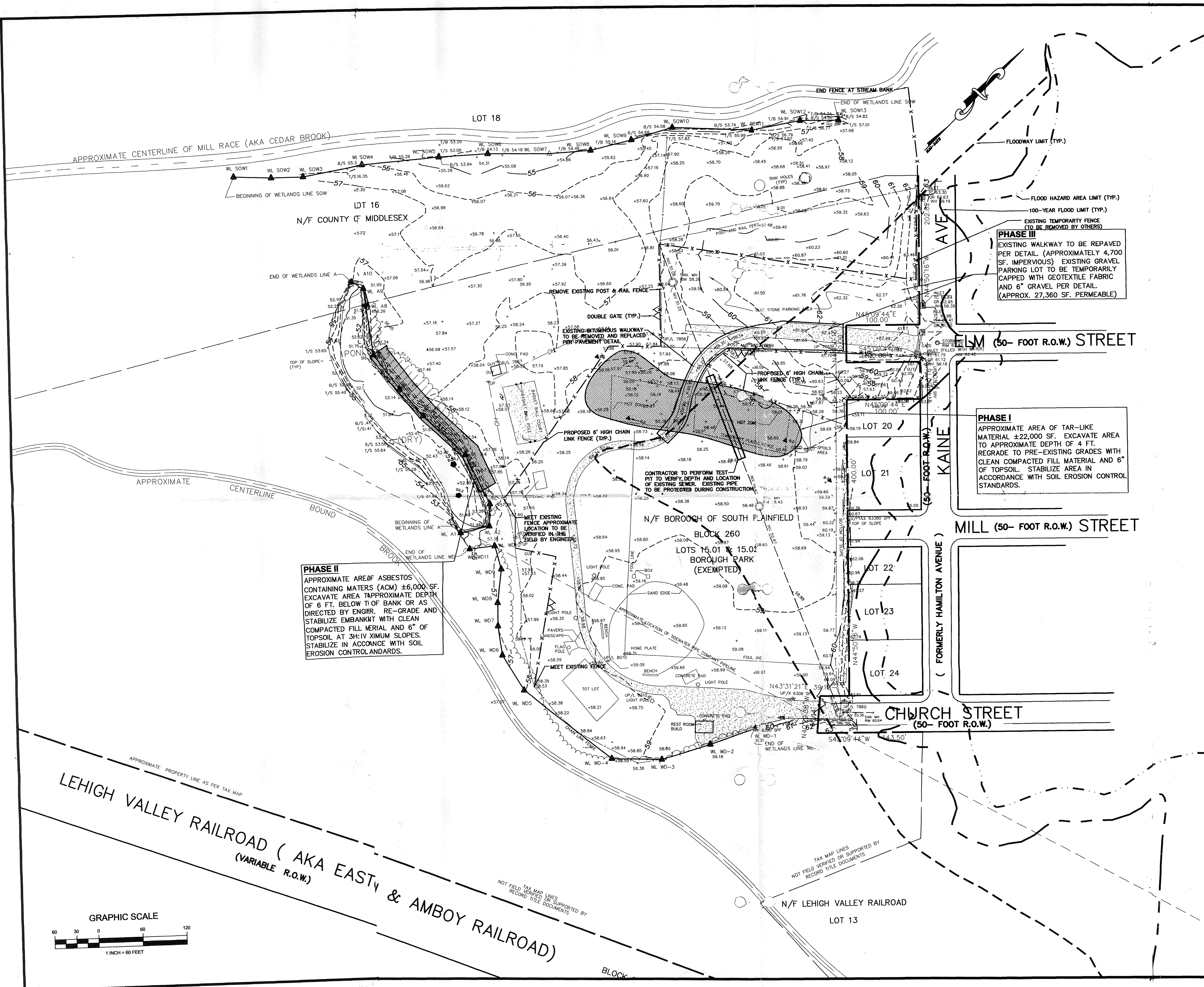
Date 1/14/04

Notary Signature [Signature]

Date 2/2/04

Sworn to and Subscribed before me this
25th day of February 2004

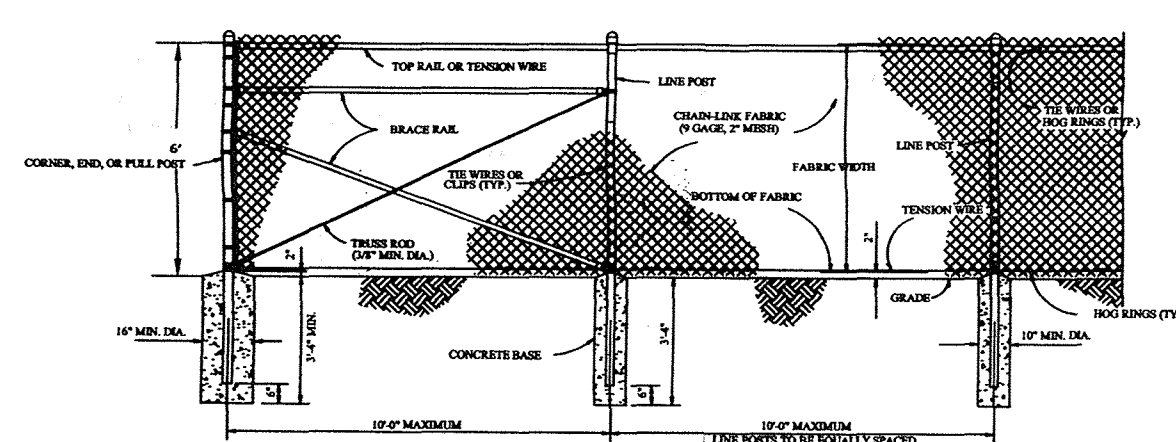
Vincent G. Buttiglieri
Notary Public of New Jersey
My Commission Expires 2006



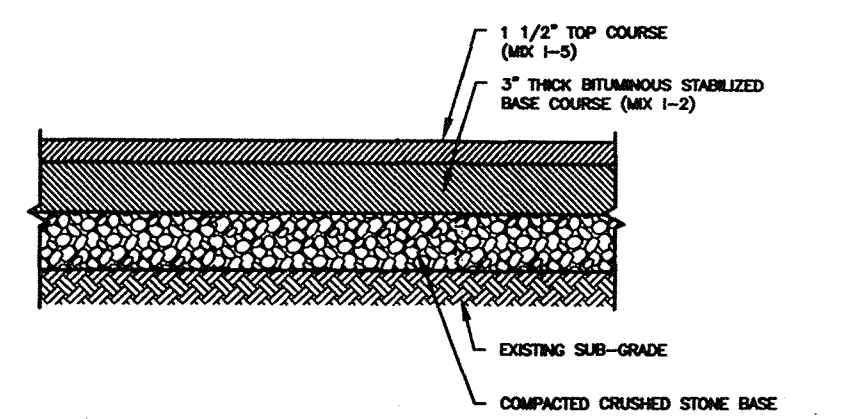
LEGEND

- X- LOCATION OF 6 FOOT CHAIN LINK FENCE TO BE INSTALLED (PHASE III).
- FLOODWAY LIMIT
- FLOOD HAZARD AREA LIMIT
- 100 YEAR FLOOD LIMIT
- FLAG- FLAG LOCATION
- WL WD-1 WETLANDS FLAG LOCATION

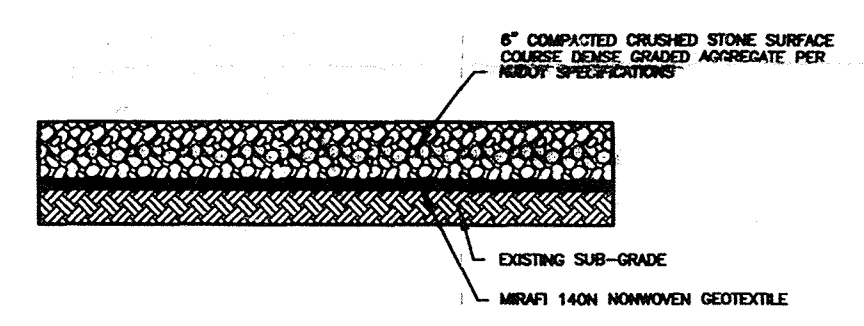
DETAILS



CHAIN-LINK SECURITY FENCE DETAIL



TYPICAL PAVEMENT SECTION



PARKING LOT SECTION


NOTES

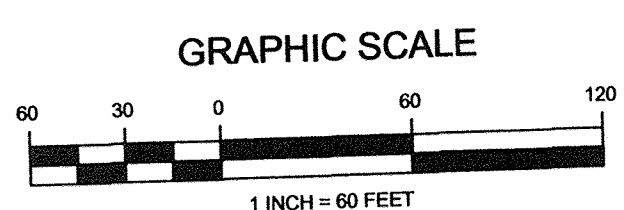
1. REFERENCE: SURVEY INFORMATION TAKEN FROM "SURVEY OF A PORTION OF VETERANS MEMORIAL PARK, BLOCK 260, PORTION OF LOT 15.01, 15.02 & 16, PREPARED FOR THE BOROUGH OF SOUTH PLAINFIELD, SITUATED IN THE BOROUGH OF SOUTH PLAINFIELD, MIDDLESEX COUNTY, NEW JERSEY" PREPARED BY CME ASSOCIATES, DATED 10/04/02.
- 2) FLOODWAY AND FLOOD HAZARD LIMITS TAKEN FROM PLAN ENTITLED "STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES DELINEATION OF FLOODWAY AND FLOOD HAZARD AREA, BOUND BROOK, STA. 1488+00 TO STA. 1545+10, BOROUGH OF SOUTH PLAINFIELD, MIDDLESEX COUNTY, NEW JERSEY, PLATE NO. 7" DATED JUNE 1977.
- 3) ALL EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN AUTHORIZED FACILITY IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

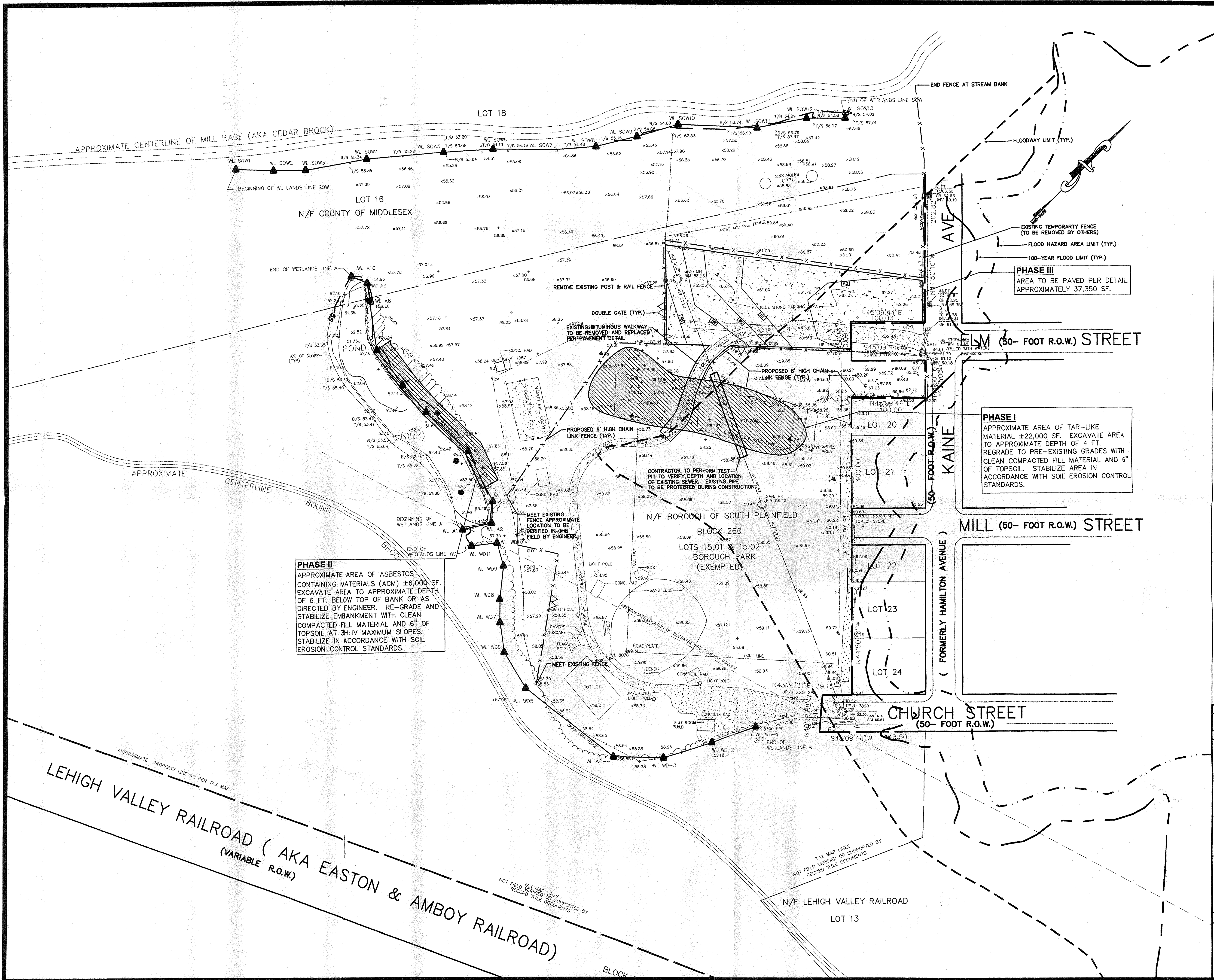
06/10/03	CT	REVISE PROPOSED PAVEMENT AREA PER NJDEP COMMENTS
05/20/03	CT	REVISE PROPOSED PAVEMENT AREA PER NJDEP COMMENTS
DATE	BY	REVISION

VETERANS MEMORIAL PARK
CHURCH STREET & KAINE AVENUE
BOROUGH OF SOUTH PLAINFIELD
MIDDLESEX COUNTY, NEW JERSEY

PROPOSED REMEDIAL ACTIONS PLAN

 65 Jackson Drive, PO Box 5000, Cranford, NJ 07016 (908) 497-8900 Fax (908) 497-9134 www.PMKGroup.com CERTIFICATE OF AUTHORIZATION #GA277039	DESIGNED BY	DATE PREPARED
	CT	03/28/03
	DRAWN BY	SCALE
	CT	1"=60'
DREW M. DI SESSA PROFESSIONAL ENGINEER	CHECKED BY	PROJECT NO.
	DDS	0302037
SIGNATURE NOT VALID WITHOUT RAISED SEAL OF P.E.		DATE
		PLATE #1

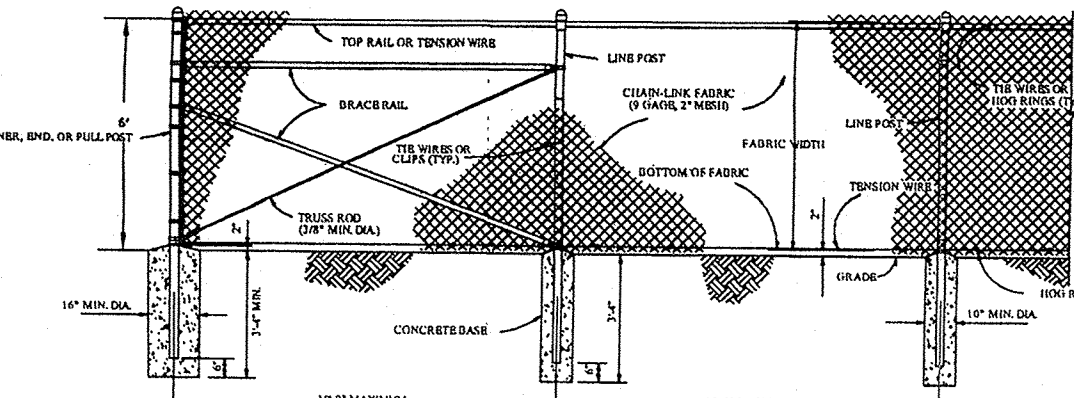




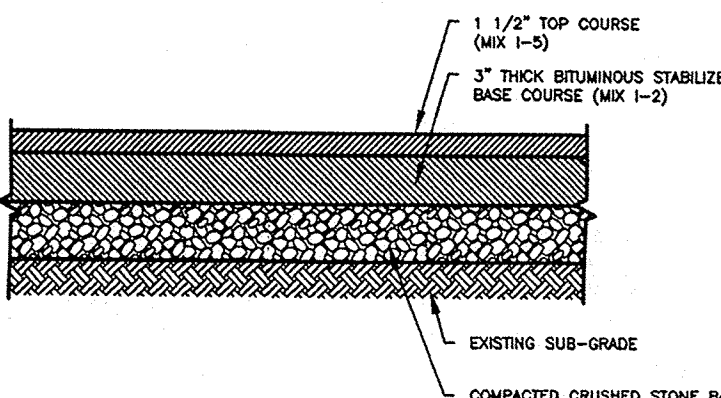
LEGEND

- X — LOCATION OF 6 FOOT CHAIN LINK FENCE TO BE INSTALLED (PHASE III).
- FLOODWAY LIMIT
- - - FLOOD HAZARD AREA LIMIT
- 100 YEAR FLOOD LIMIT
- FLAG -- FLAG LOCATION
- WL WD-1 WETLANDS FLAG LOCATION

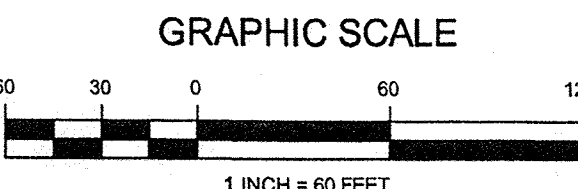
DETAILS



CHAIN-LINK SECURITY FENCE DETAIL



TYPICAL PAVEMENT SECTION



NOTES

- REFERENCE: SURVEY INFORMATION TAKEN FROM "SURVEY OF A PORTION OF VETERANS MEMORIAL PARK, BLOCK 260, PORTION OF LOT 15.01, 15.02 & 16, PREPARED FOR THE BOROUGH OF SOUTH PLAINFIELD, SITUATED IN THE BOROUGH OF SOUTH PLAINFIELD, MIDDLESEX COUNTY, NEW JERSEY" PREPARED BY CME ASSOCIATES, DATED 10/04/02.
- FLOODWAY AND FLOOD HAZARD LIMITS TAKEN FROM PLAN ENTITLED "STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES DELINEATION OF FLOODWAY AND FLOOD HAZARD AREA, BOUND BROOK, STA. 1488+00 TO STA. 1545+10, BOROUGH OF SOUTH PLAINFIELD, MIDDLESEX COUNTY, NEW JERSEY, PLATE NO. 7" DATED JUNE 1977.
- ALL EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN AUTHORIZED FACILITY IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

VETERANS MEMORIAL PARK
CHURCH STREET & KAINE AVENUE
BOROUGH OF SOUTH PLAINFIELD
MIDDLESEX COUNTY, NEW JERSEY

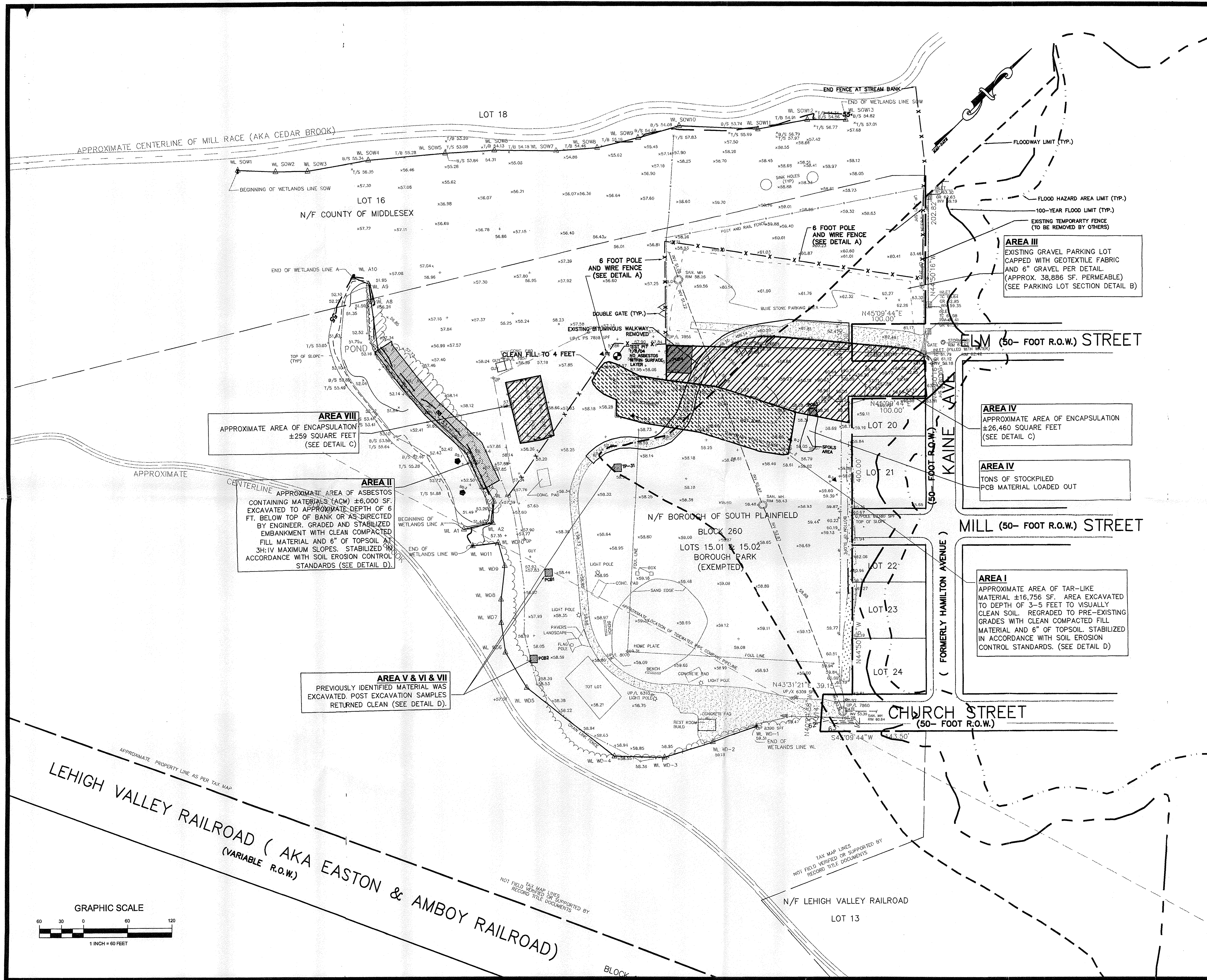
PLANNED REMEDIATION



DESIGNED BY	CT	DATE PREPARED	03/28/03
DRAWN BY	CT	SCALE	1"=60'
CHECKED BY	BD	PROJECT NO.	0502014-01
THOMAS O. MINEO PROFESSIONAL ENGINEER	N.J.P.E. LIC. NO. 19646	PLATE NUMBER	2

SIGNATURE NOT VALID WITHOUT RAISED SEAL OF P.E.

DATE



LEGEND

- X - LOCATION OF 6 FOOT POLE AND STRAND FENCE. (PHASE II).
- - - FLOODWAY LIMIT
- . . . FLOOD HAZARD AREA LIMIT
- - - 100 YEAR FLOOD LIMIT
- WL WD-1 - WETLANDS FLAG LOCATION

DETAILS

POLE AND WIRE STRAND FENCE DETAIL-A

N.T.S.

PARKING LOT SECTION DETAIL B

N.T.S.

CAP CONSTRUCTION (DETAIL C)

N.T.S.

BACKFILL SECTION DETAIL D

N.T.S.

NOTES

- REFERENCE: SURVEY INFORMATION TAKEN FROM "SURVEY OF A PORTION OF VETERANS MEMORIAL PARK, BLOCK 260, PORTION OF LOT 15.01, 15.02 & 16, PREPARED FOR THE BOROUGH OF SOUTH PLAINFIELD, SITUATED IN THE BOROUGH OF SOUTH PLAINFIELD, MIDDLESEX COUNTY, NEW JERSEY" PREPARED BY CME ASSOCIATES, DATED 10/04/02.
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- ALL EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN AUTHORIZED FACILITY IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

DATE	BY	REVISION
06/10/03	CT	REVISE PROPOSED PAVEMENT AREA PER NJDEP COMMENTS
05/20/03	CT	REVISE PROPOSED PAVEMENT AREA PER NJDEP COMMENTS

**VETERANS MEMORIAL PARK
CHURCH STREET & KAINE AVENUE
BOROUGH OF SOUTH PLAINFIELD
MIDDLESEX COUNTY, NEW JERSEY**

REMEDIAL ACTIVITIES

DESIGNED BY	DATE PREPARED
CT	01/21/04

DRAWN BY	SCALE
GH	1"=60'

CHECKED BY	PROJECT NO.
BD	0502014-01

THOMAS O. MINEO PROFESSIONAL ENGINEER	N.J.P.E. LIC. NO. 19646
SIGNATURE NOT VALID WITHOUT RAISED SEAL OF P.E.	DATE

CERTIFICATE OF AUTHORIZATION #GA277039

PLATE NUMBER
3

